

Attachment B – Blacklines
Integrated Balancing Authority Area Modeling and Pricing Compliance Filing
4th Replacement CAISO Tariff (MRTU)

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27.5.3.2 Information Required for Integrated Balancing Authority Area to Obtain Alternate Pricing under a Market Efficiency Enhancement Agreement

The CAISO shall enter into Market Efficiency Enhancement Agreements (MEEAs) with entities controlling supply resources within IBAA's to provide alternative modeling and pricing for imports or exports between the IBAA to the CAISO if the IBAA entity provides the required information. During the process of establishing an MEEA, the CAISO may require that any signatory to an MEEA provide historical hourly metered generation data for all supply resources within the IBAA and metered load data in a standard electronic format, for use in determining the injection and withdrawal points that will be used to model the IBAA under the MEEA, pursuant to Section 27.5.3.9. After the establishment of an MEEA, in order to obtain the alternate pricing agreed to in the MEEA, the IBAA entity controlling such supply resources or serving such load under the MEEA must provide the following hourly information:

- (a) total generation within the IBAA at each of the injection points used to model the IBAA, as determined by the CAISO pursuant to Section 27.5.3.9;
- (b) total gross energy scheduled into the IBAA from other Balancing Areas (excluding the CAISO Balancing Authority Area);
- (c) total gross energy purchases made at delivery points within the IBAA, including:
 - (i) purchases from third parties, and
 - (ii) exchanges acquiring energy from third parties
- (d) total load served within the IBAA, including a calculation or estimate of load at each of the withdrawal locations used to model the IBAA, as determined by the CAISO pursuant to Section 27.5.3.9
- (e) total gross energy scheduled out of the IBAA into other Balancing Areas (excluding the CAISO)
- (f) total gross energy sales made for delivery points within the IBAA, including
 - (i) sales to third parties, and
 - (ii) exchanges providing energy to third parties

[**Question** -What about the underlying costs of production? What if I set up an MEEA for every generator inside of my IBAA. Doesn't the CAISO need to see underlying costs for everything so that I don't "cherry pick" my "sources" of sales to the CAISO simply to chase the highest price? The MEEA should have an obligation to demonstrate that low cost resources are first used to serve native load, and only remaining "expensive" resources are eligible for MEEA pricing.]

This information is necessary for the purposes of verifying the location and operation of the supply resources within an IBAA dispatched to implement an import Interchange transaction into the CAISO Balancing Authority or the location of load in the IBAA served by an export Interchange transaction from the CAISO Balancing Authority Area. Data provided shall include schedules, exchanges and transactions for the MEEA signatory and any organizational or financial affiliation with the MEEA signatory. In addition, in the event that there is a Dynamic Resource-Specific System Resource in the IBAA, the IBAA entity in control of such resource may also obtain alternative pricing for sales to the CAISO Balancing Authority Area from the Dynamic Resource-Specific System Resource, as further provided in the IBAA entities' MEEA. Data shall be provided in standard electronic format in a manner and timeline that is consistent with the scheduling, bidding, operational and Settlement requirements under the CAISO.

27.5.3.2.2 Purchases from the CAISO Balancing Authority Area

- (a) During any hour in which an MEEA entity makes sales to the CAISO Balancing Authority at the same time that the IBAA entity is making an energy purchase from the CAISO
- [**Question** – What is the difference between a "MEEA entity" and an "IBAA entity". In this language are these the same entities? What if, for example, both SMUD and MID are "IBAA entities", but then MID enters into an MEEA. If MID makes a sale as a MEEA to the CAISO, at the same time SMUD makes and energy purchase as an IBAA entity, does this rule apply? Or, does MID have to be on both sides of the transaction?] Balancing Authority, the IBAA entity will not be charged the alternative pricing LMP but rather will be charged the default pricing point specified in Appendix C Section G.2 for the corresponding volume and time period.

[Question – What are purchases in excess of sales charged? I assume the alternative pricing LMP but the language should be clear.]

[Question – If the default pricing point < MEEA price, does this create a money machine? (Sell at the MEEA price, buy back at the lower default pricing point?)

To stop gaming, the buy-back rule should be change such that the IBAA purchases are charged:

max(alternative LMP for any MEEA sales, default pricing point, alternative pricing LPM for purchases)

- (b) During any other hour in which an MEEA entity makes purchases from the CAISO Balancing Authority from the IBAA, the MEEA entity will be charged the alternative pricing for any purchases from the CAISO Balancing Authority Area up to the following quantity:
- Maximum Eligible Purchases from CAISO Balancing Authority Area = Load – Generation – Gross Imports into IBAA – Gross Purchases within IBAA.

For any energy purchases from the CAISO Balancing Authority in excess of this maximum limit, the MEEA entity will be charged the default pricing point specified in Appendix C Section G.2 for the corresponding volume and time period.

[Question - To do this settlement, the CAISO will need this data for every hour that have transactions, correct? How does the CAISO get this information and how do they work it through their settlement systems?]

27.5.3.8 Process for Adopting a New IBAA or Modifying an Existing IBAA.

[Note – this language was taken from section 27.5.3.3 as previously filed and moved to this section after we deleted the language of the MEEA process. The conforming changes below are only for the purposes of deleting the MEEA from this process and also to comply with the Commission order that it is clear that the CAISO will not change an IBAA or adopt a new IBAA without first seeking FERC-approval.]

Except under exigent circumstances, the CAISO must follow a consultative process with the applicable Balancing Authority and CAISO Market Participants pursuant to the process further defined in the

Business Practice Manuals, to establish a new IBAA or modify an existing IBAA. 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 establish a new IBAA or modify an existing IBAA, the CAISO will seek FERC approval under Sections 205 of the Federal Power Act of the proposed new IBAA or changes to the existing IBAA requirements; [at which time the CAISO shall also provide, for a public review](#), its supportive findings for the establishment of the new IBAA or modification to an existing IBAA

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CAISO TARIFF APPENDIX C

Locational Marginal Price

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G.1 Intertie Scheduling Point Price Calculation for IBAAs

G.1.1 Scheduling Point Prices 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 Intertie 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 Intertie Scheduling Point LMPs based on the injection and withdrawal locations associated with each Intertie 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. Unless as required pursuant to an existing MEEA, the default pricing for all exports [from the CAISO to the](#) the IBAA(s) specified in Section 27.5.3.1 will be based on the LMP for the SMUD IBAA hub and all imports from the IBAA(s) [to the CAISO](#) will be based on a mapping to the Captain Jack substation as defined by WECC. The LMP for the SMUD hub will be based on Intertie distribution factors [developed from a seasonal power flow base case of the WECC region, which is further identified in the Business Practice Manuals](#)

using an equivalencing technique which consists of three steps, for the limited purpose of computing as follows:

1. The SMUD IBAA is equivalenced to only the buses that comprise the System Resources, with all generation also being retained at its buses. The resulting load distribution within each aggregated System Resource defines the Intertie distribution factors for exports from the CAISO Balancing Authority Area.
2. The SMUD IBAA is then equivalenced to only the buses that comprise the System Resources, but this time with no generation being retained. The difference in load at the retained buses after it is netted with generation, relative to step 1, defines the Intertie distribution factors for imports to the CAISO Balancing Authority Area.
3. Because the CAISO anticipates that a single aggregated System Resource will be used for both imports and exports, the Intertie distribution factors resulting from steps 1 and 2 are averaged.