

SMUD Comments on the CAISO's December 14, 2007 Integrated Balancing Authority Area Modeling and Pricing Proposal

I. Introduction

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments to the California Independent System Operator Corporation's (CAISO) proposal for the modeling and pricing of so-called Integrated Balancing Authority Areas (IBAA). SMUD indeed has numerous concerns with the proposal, but the proposal is made even less palatable by its timing and context. One point should be clear at the outset. The CAISO's two December 14 Discussion Papers – "MRTU Release 1 Implementation of Preferred Integrated Balancing Authority Area Modeling and Pricing Options" and "Modeling and Pricing Integrated Balancing Authority Areas Under the California ISO's Market Redesign and Technology Upgrade Program" (hereinafter "MRTU Release 1 Discussion Paper" and "Modeling and Pricing Discussion Paper") refer to discussions with SMUD and other neighboring balancing authority area operators leave the impression that the proposal is the outgrowth of a collaborative process between the CAISO and these parties. This is not the case. As outlined below, SMUD and the other CAISO-selected balancing authority (BA) entities were engaged at varying intervals over the past year, but were without the benefit of anything remotely specific until the last couple of months. When the CAISO finally released the details of its proposal in early October 2007, SMUD and the other balancing authority areas strenuously objected to the timing and content of the CAISO's proposal. Further, important questions about the impact of the CAISO's proposal on the SMUD/Western and TID BAs remain unanswered. Below is a high level synopsis of the timelines to provide some needed context to the CAISO proposal.

II. Timeline

In December 2006, SMUD, along with the CAISO, attended the FERC Technical Conference on Seams, held in Phoenix (Seams Conference). It was at that Seams Conference that the CAISO announced it would "pursue discussions with so-called embedded and adjacent control [balancing authority] areas" to discuss CAISO modeling of those BAs. The CAISO did indeed begin discussions with other adjacent balancing authorities relevant to this proposal, but not for over *seven months after* the Seams Conference ended –and even then, only with SMUD and the Western Area Power Administration Sierra Nevada Region (Western). In June 2007, the CAISO first introduced a *modeling* concept that that would utilize scheduling points for the adjacent systems, but with distribution factors to be used to allow the CAISO to estimate flows behind the ties. There was no mention then of aggregated *pricing* hubs for SMUD or Western.

It was during an August 21, 2007 meeting between the CAISO and SMUD, Western, the Modesto Irrigation District (MID), the City of Redding (Redding) and the Turlock Irrigation District (TID) that the CAISO unexpectedly floated what was still then only a *concept* of a pricing hub, citing its concerns that allowing SMUD, Western or TID to

have multiple scheduling points could lead to gaming. When pressed on the specifics, including the possible impact on congestion revenue rights (CRR) nominations, the CAISO promised a write-up in a week or two to outline the concept. This was no small concern – the CRR nomination process had already started earlier that month and would end in mid-September 2007.¹

It was not until October 5, 2007, however, -- after the CRR nomination period had ended -- that the CAISO circulated to the SMUD two *draft* discussion papers, outlining the proposed modeling and pricing treatment of the so-called Embedded and Adjacent Control Areas (ECAs and ACAs, respectively)² under its Market Redesign and Technology Upgrade (MRTU).³ Those papers outlined for the first time the CAISO's intention to move from intertie-based pricing to pricing at a hub for a discriminate few adjacent and embedded BAs with multiple interconnections with the CAISO, including SMUD. The CAISO invited and received comments on its tentative proposals from a number of parties in November. SMUD, together with the other parties directly impacted by the proposal – Western, TID, MID, Redding, the City of Roseville and the Department of Energy, Office of Science – sent comments to the CAISO via a letter to Chuck King dated November 14, expressing their fundamental objections to the proposal presented. Specifically, SMUD and the other parties noted that: 1) the CAISO had not substantiated why these three balancing authority areas alone⁴ should be treated any differently than any other interconnected balancing authority areas or so-called IBAA with respect to modeling and pricing; 2) the CAISO proposal singles out the SMUD/Western and TID BAs for unique treatment and burdens based on a mere anecdotal case apparently claimed to illustrate the SMUD/Western and TID BAs' distinct impacts on the CAISO grid, but without empirical, concrete evidence that they actually have a significantly greater impact than, or an impact even close to, other BAs; 3) the CAISO had not (a) sufficiently vetted alternatives, including the radial modeling option that would otherwise apply to all other interties, (b) detailed any of its proposals to justify them, nor (c) provided enough data to ensure that the Parties' customers will not be harmed ; and 4) the CAISO had been slow to address this issue and now has prejudiced the Parties as to their CRR nominations.

On December 14, 2007, the CAISO circulated to the broader stakeholder community two related and earlier-referenced discussion papers intended to finalize its proposal and requested comments. Unfortunately, as discussed in more detail below, the CAISO's discussion papers do not address the fundamental objections previously outlined to it by SMUD and the other independent balancing authority areas. Of additional concern is the CAISO's announcement at the stakeholder conference call held on December 20 to discuss these papers that it had no intention to file revised tariff sheets reflecting the new

¹ The CAISO opened its market for CRR Tier 1 Annual (2008) Allocation requests on August 3, 2007 and closed the market on September 14, 2007. See <http://www.caiso.com/1bcc/1bccf1dccb30.pdf>, at 8.

² By the CAISO's definition, SMUD/Western and TID are called ACAs.

³ The CAISO has provided SMUD with two discussion drafts. The First is titled "CAISO Discussion Paper on Modeling and Treatment of Embedded and Adjacent Control Areas Under the CAISO's MRTU," October 4, 2007, V5.0 (Paper 1). The second draft bears the same title, except that it has the identifier "CAISO/MRTU/MAR" (Paper 2).

⁴ The SMUD Balancing Authority Area includes the Western Area Power Administration's sub-balancing authority area.

pricing and modeling methodology it intends to implement. As SMUD also discusses below, CAISO's refusal to file these dramatic changes violates the Federal Power Act and would deprive affected parties of the opportunity to raise substantive concerns about the changes with the FERC, the agency charged with the responsibility to determine their reasonableness.

III. Discussion

1) The CAISO's Proposal overreaches into the affairs and operations of the SMUD Balancing Authority.

The CAISO has chosen an LMP-based congestion management system to help it to address some of the structural flaws of its current market structure. SMUD cannot control this. However, the CAISO proposal does not stop at the point of interconnection between the SMUD and CAISO Bus, as it should. For example, Table 1 of the MRTU Release 1 Discussion Paper (p. 5) lists two *internal* SMUD substations as import and export points with the CAISO. Neither the Elverta nor the Hurley substations, however, form an interconnection point with the CAISO. They are internal to SMUD and should be irrelevant as far as the CAISO's proposal is concerned. The CAISO will not have scheduling information for transactions between Western and SMUD Systems and actual flows through these points may be impacted as much or more by CAISO transactions scheduled from north of the SMUD System, flows within BPA's system that impact COI transfer capacity, or from generic system loop flows.

2) The SMUD/Western and TID Balancing Authorities should not be treated differently than any other Balancing Authorities.

One of the reasons originally given by the CAISO in support of the proposal is its asserted concern about the potential for gaming at the interties. The concern is wholly unfounded and cannot justify the disparate treatment of the selected BAs. The concern is predicated on the alleged threat of gaming by these BAs, even though there is no historical or other basis for such an expectation. But even if there were anything but rank speculation in support of this approach, it would not be justified. The CAISO has other avenues to address its concerns about unlawful market manipulation, such as reporting alleged incidents to the FERC. SMUD has always acted, and will continue to act, in a prudent and legal manner. It would be patently unreasonable for the CAISO to place restrictions on SMUD and other BAs on the assumption that we will deviate from our demonstrated high ethical standards. The CAISO's selective application of these concerns to the SMUD/Western and TID BAs in attempting to resolve one supposed problem, may simply create new ones or significantly disadvantage the affected BAs in the power market in comparison to other BAs. MRTU, in one form or another, has been in design and implementation for nearly seven years. These issues that the CAISO now claims to have prompted its proposal should have been raised and addressed years ago, not at the eleventh hour and after CRRs have already been awarded.

Another reason given by the CAISO to model the internal SMUD network is that SMUD has historically scheduled differently from the actual flows. But this is not a valid grounds for CAISO's new pricing approach. SMUD has scheduled historically in this way in accordance with the CAISO's own Rancho-Lake Branch Group scheduling instructions. Those instructions did not differentiate whether schedules were tagged at Rancho Seco or the Lake Interconnections. Under MRTU, SMUD would expect to react to LMP congestion pricing and that the optimal scheduling would equilibrate to flows.

Finally, as discussed below, the CAISO has completely disregarded SMUD's argument that it made its CRR nominations at specific points, not to game the system, but based on its expectation that if congestion on particular paths was expected to be low, SMUD would secure its scarce CRR allocations on other paths. The objections outlined above were previously raised with the CAISO, but neither of the CAISO's December 14 papers addresses them.

3) The Original CAISO Proposal singled out the SMUD/Western and TID BAs for unique treatment and burdens based on an anecdotally-based assumption that they have a distinct impact on the CAISO grid. The CAISO's December 14 Papers abandon this rationale for the disparate treatment of SMUD/Western and MID, but still retain the disparate treatment.⁵

The CAISO earlier claimed to justify its pricing and modeling proposal on the grounds that its "network is more closely integrated with the networks of the combined Sacramento Municipal Utility District (SMUD)/Western Area Power Administration (WAPA)/Modesto Irrigation District (MID) Control Area and Turlock Irrigation District Control Area" and "that a more accurate representation of the impact of physical flows on these systems is more desirable allow the CAISO to better achieve its objective of maintaining reliability and achieving efficient market operation." "[B]ecause their transmission network is embedded in and/or runs parallel to major parts of the CAISO network," the CAISO reasons, they have "a more significant impact than other External Control Areas, in the operation of the CAISO Control Area."⁶

SMUD's earlier comments pointed out, however, that the mere proximity of the SMUD/Western and TID BAs to the CAISO grid does not itself establish that those BAs have "a more significant impact than other External Control Areas" on the CAISO's operations. On the contrary, the CAISO's conclusion seems to have been drawn from purely anecdotal experience. The CAISO drew numerous conclusions as to the impacts of it various pricing options by analyzing the data from a *single* pricing run for only specific BAs for each of the pricing options by comparing the LMPs produced during a *solitary*, perhaps aberrational hour in 2005 -- Hour 16 on June 30, 2005 -- yet it ignored

⁵ SMUD understands that on January 2, 2008, the CAISO issued another discussion paper to address the expansion of its modeling to other entities besides those addressed in these instant discussion drafts. Due to the comment date set by the CAISO, SMUD does not incorporate the January 2 paper in these comments. SMUD does observe that this only serves to bolster our position that the CAISO should engage this topic comprehensively, with all the affected parties allowed to propose possible solutions, rather than the CAISO's piecemeal approach.

⁶ Paper 1 at 4.

the broader view and potentially larger impact of BAs located in Southern California, the Southwestern and the Northwestern United States. This choice was made all the more puzzling given that the Parties (as well as the other Market Participants) had used 2006 for their LMP analyses in the 2008 annual CRR nomination and allocation process. Therefore, it was nearly impossible to draw any conclusions whatsoever from such an analysis. Moreover, it gave the impression that the CAISO selected a particular date, time and BA to produce a desired result. There was, in fact, no study offered to support the need to treat the SMUD/Western and TID BAs differently. Accordingly, SMUD urged that all interconnected BAs be modeled and treated the same by the CAISO.

The CAISO's attempt to relate this process to the maintenance of reliability is misleading. The CAISO operates currently as all BAs in the Western Interconnection using contract point-to-point scheduling practices. The Western Interconnection has and does operate in a reliable manner with adequate reliability margins. There is absolutely no evidence that including two relatively small Balancing Authority Areas out of the 35 existing BA's within the WECC would improve the reliability of system operations. If the CAISO truly believes that reliability may be reduced if the SMUD/Western and TID BAs are not modeled this way then it would be logical to deduce that system reliability would be significantly degraded if LMP is implemented and the other larger systems remain as radial models with multiple uncontrolled tie points. This is an economic issue only, and the CAISO should not characterize it any other way.

The CAISO's December 14 papers, however, abandon the distinct impact rationale altogether. The CAISO now states that its hub pricing *should* apply to *all* Integrated Balancing Authority Areas (IBAAAs), i.e., entities with "multiple free-flowing AC interconnections with the CAISO Balancing Authority Area"⁷ based on its analysis of some still-unidentified "empirical data." But, while it admits that "there are others that technically fall in the IBAA category," and that it will apply the new methodology to them "as soon as it becomes technically feasible to do so" (MRTU Release 1 Discussion Paper at 3), it claims that for Release 1, "the only External Balancing Authority Areas the CAISO *will be able* to implement as IBAA are the combination Sacramento Municipal Utility District (SMUD) and Western Area Power Administration (Western) IBAA and the Turlock Irrigation District ("TID") IBAA." *Id* at 1.

Why only these select Balancing Authorities? The CAISO offers a *non sequitur*: "It is important," the CAISO says, "to apply the IBAA methodology to these entities right at the start because their parallel transmission network and flows have significant impact on the CAISO Balancing Authority Area." *Id*. But CAISO does not even attempt to demonstrate that the flows on these systems have any more significant impact than those of other so-called IBAAAs.⁸ SMUD pressed on this very point on the December 20 stakeholder call and has received no satisfactory response.

⁷ MRTU Release 1 Discussion Paper at 1.

⁸ The CAISO's second December 14, 2007 Discussion Paper, "Modeling and Pricing IBAAAs Under the CAISO MRTU," repeats the unsubstantiated assertion made in its earlier drafts that the SMUD, Western and TID transmission networks "are embedded in and/or run parallel to major parts of the CAISO network,

The CAISO has simply failed to explain why the other adjacent BAs, all of which have multiple tie points and therefore would seem to create an equal, if not greater, concern to the CAISO (i.e., due to the relative magnitude of transactions compared to that of the SMUD/Western and TID BAs), have not been included in the CAISO's proposal. Other similarly-situated BAs would include:

- Arizona Public Service (APS) - 3 geographically diverse ties or scheduling points: North Gila in Southern Arizona and El Dorado in Northern Arizona, in addition to CAISO's transmission adjacency to multiple parties in eastern Arizona at Four Corners.
- Western Area Power Administration Lower Colorado (WALC) - 3 tie points, Parker, Blythe and Mead 230kV.
- Imperial Irrigation District (IID) - 3 tie points: Imperial Valley, Mirage and Devers.
- Nevada Power - 3 tie points El Dorado 230 kV and Mojave 500 kV and Laughlin 69kV
- Los Angeles Department of Water and Power (LADWP) - 4 tie points: Sylmar AC, Lugo, McCullough, and Inyo.

4) The CAISO has been slow to address this issue and now has prejudiced SMUD as to its Congestion Revenue Rights (CRR) Nominations.

As noted in the timelines outlined *supra*, the delayed release of the CAISO's discussion papers and proposed implementation could result in significant harm to SMUD and the other targeted BAs. The CAISO has already proceeded with its 2008 CRR allocations, in which SMUD participated. Shortly after CRRs were awarded, however, the CAISO unilaterally decided to propose new and untested treatments of the SMUD/Western and TID BAs. The proposed changes significantly revise the basic market structure for CRRs and negate the assumptions used by the SMUD in making its CRR nominations.

There are several CRR-related problems associated with moving from intertie-specific pricing to pricing at a hub. The first pertains to the financial settlement of CRRs that would result from such a change. This, the CAISO has assured, will not be affected. Again, there is little data to support this assertion. However, even if the Parties accept this assurance at face value, there are other problems which are more difficult to quantify without additional LMP studies.

and thus have a more significant impact than other IBAs on the operation of the CAISO Balancing Authority Area." Modeling Discussion Paper at 4. But this *ipse dixit* assertion does not substitute for actual analysis. And it surely doesn't answer the concern – one the CAISO presumably heard during its discussions with SMUD, Western and TID – that selective implementation of the CAISO's IBAA pricing and modeling methodology would likely do more harm than good.

What the CAISO proposal does not address is how the Parties' CRR nominations might have changed with a hub (aggregation) rather than a scheduling point as a Party's CRR sink. That is, it is likely, even probable, that the Parties would have nominated an entirely different set or quantity of CRRs had they compared the marginal congestion price differences between a specific source and sink, when that sink is an aggregated hub, versus a specific scheduling point (intertie).

Related to this concern, the late change the CAISO has proposed ignores the impact on the SMUD schedules that are *not* covered by CRRs. For example, when SMUD studied the congestion risks associated with the development of their CRR nominations, there were times it did not select CRRs for a particular season or at a specific tie point. This is because it was determined that it could avoid congestion charges by scheduling at a non-congested tie point and avoid the other congested tie points. The CAISO proposal removes this option and will subject SMUD to congestion without the opportunity to revise its CRR nominations. This type of after-the-fact change is simply unreasonable.

The CAISO has been discussing the modeling of its ties for more than a year and has promised to address the issue for a similar period. Yet its proposal comes now, *after* the SMUD/Western and TID have made their CRR nominations. SMUD pointed this problem out to the CAISO in earlier comments too.⁹ Again, however, the CAISO's December 14 Discussion Papers do not address any of SMUD's concerns.

5) The proposal significantly affects SMUD rates and therefore must be filed with the Commission

Of all the impacts associated with the CAISO's new pricing mechanism, most astonishing is CAISO's determination – announced on its December 20, 2007 conference call with stakeholders - that it will not even file its proposal as a tariff change with FERC. Just a few days ago, on December 21, 2007, however, the CAISO filed changes to its tariff to reflect its transmission planning policies (Docket No. OA08-62), explaining that the Federal Power Act obligated it to file as part of its tariff “all provisions that significantly affect *rates* and services,” (Transmittal letter at 7) noting that the Act requires the filing of practices that have “a significant affect on *rates* and services” and that “are not so generally understood in any contractual arrangement as to make recitation superfluous.” *Id.* at 8 (quoting *City of Cleveland v. FERC*, 773 F.2d 1368 (D. C. Cir. 1985)). Here, the CAISO had devoted two draft papers, several stakeholder meetings, two more discussion papers and another round of comments to its proposal, a proposal the

⁹ In a December 6, 2007 letter sent to SMUD, the CAISO said there was no prejudice because the CAISO had told SMUD and other adjacent control areas at the FERC Seams Conference in December 2006 that it would discuss pricing and modeling with them. But that promise to discuss the general issue could not have constituted notice of CAISO's specific intentions. On the contrary, it did not even meet with SMUD on the issue until June, 2007 and made no mention even then that it planned to use pricing hubs for SMUD and Western. Indeed, it was not until August of this year that CAISO even floated the *concept* of hub pricing – and no proposal to that effect was forthcoming until October 5, 2007 – after SMUD had made its CRR nominations. Even then, the document was labeled as a “Draft” – not a document from which SMUD could make market or financial decisions.

CAISO itself characterizes as the IBAA “modeling and *pricing* methodology.”¹⁰ If its intended practice had been “generally understood,” none of this process would have been necessary. But of course none of this was “generally understood” from its tariff, certainly not the fact that its proposal would only apply to *some* BAs. On the contrary, the CAISO states that it will apply the methodology described in the MRTU Release 1 Discussion Paper to all IBAs “as soon as it becomes technically feasible to do so.” MRTU Release 1 Discussion Paper at 3. Surely, CAISO does not claim that recitation of even this point in its tariff would be “superfluous.” On the contrary, the CAISO’s refusal to file its proposal with FERC prevents FERC from addressing what, at a minimum, is its facially discriminatory nature.¹¹

IV. Conclusion

SMUD remains committed to working with the CAISO. It seems, however, that the CAISO has forged ahead on a path without adequate neighboring Balancing Authority review, and without adequate consideration or even development of potential alternatives. SMUD urges a more reasoned approach where the CAISO clearly identifies its concerns, invites impacted parties to participate and works to develop alternatives that meet the needs of the parties. Such a plan would be best developed after, not before, MRTU is implemented and real, not imagined, problems arise. In the meantime, the CAISO should continue to treat SMUD and the other parties affected by this proposal in a manner consistent with the CAISO’s radial modeling treatment of other BAs. Finally, should the CAISO nevertheless decide to proceed, it should do so by formally filing its proposal with the FERC.

Respectfully Submitted, January 4, 2008

¹⁰ *Id.* at 3.

¹¹ The MRTU Release 1 Discussion Paper describes its IBAA modeling and pricing methodology as “similar to how the RTOs in the Eastern Interconnection model transactions from neighboring Balancing Authority Areas using a ‘Proxy Bus.’” But the proxy bus approach of those RTOs is expressly incorporated in their tariffs – not relegated to unfiled “discussion papers.”