



Comments of Pacific Gas and Electric Company

RTIEO Revised Straw Proposal

Submitted by	Company	Date Submitted
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Pacific Gas & Electric (PG&E) appreciates the opportunity to participate in the stakeholder process for the California Independent System Operator’s (CAISO) Impact of Convergence Bidding on Real-Time Imbalance Energy Offset (RTIEO) initiative and to submit comments regarding the May 18, 2011 Revised Straw Proposal.

Given that the RTIEO has significantly decreased in recent weeks, PG&E believes the potential benefits of making significant changes to the physical HASP market would be outweighed by the costs of implementation and the possible risk of unintended consequences. PG&E instead encourages the CAISO to continue pursuing incremental market improvements to reduce the RTIEO and the impact it has on market participants. Finally, the MSC and DMM should weigh in on this proposal before it receives Board approval. Our major comments are summarized below:

- Support settling intertie virtual bids on RTD prices rather than HASP prices
- Oppose making major changes to physical bidding or settlement at this time
- Would support settling physical deviations from HASP schedules at the RTD price
- Do not support allowing Convergence Bidding between HASP and RTD
- Support a broader allocation of the RTIEO uplift
- Continue to support the CAISO’s proposal for an emergency filing

1. Summary of CAISO Proposal

The CAISO Proposed Three Mid-Term Market Changes to Address the RTIEO

The first category of fixes includes different ways of settling hour-ahead intertie bids so that there is not a systematic divergence between hour-ahead and real-time prices. Settling physical HASP awards on a Pay as Bid or Bid or Better basis is proposed in conjunction with liquidating all intertie virtual bids at the real-time price. Another suggestion in this first category is to keep HASP prices the same but to settle physical deviations from HASP awards at the real-time price.

The second category consists of changes to the cost allocation of the RTIEO uplift. The CAISO does not propose a specific allocation methodology but suggests it would be open to spreading the costs to a broader group of market participants. Currently the RTIEO is only charged to metered load and exports.

The third category consists of changing how convergence bids are liquidated to hopefully incentivize IFM-HASP-RTD price convergence. When HASP runs today, all convergence bids (both internal and interties) are liquidated. However, under this proposal, only the intertie virtual bids would be liquidated in HASP. The remainder of the internal virtual bids would not be liquidated until the real-time market.

This Proposal Also Includes the Emergency Filing of a Short-Term Settlement Rule

In addition to these mid-term fixes, this proposal also includes an emergency settlement rule that would be invoked if the RTIEO attributable to balancing and offsetting virtual positions exceeded \$20 million over a 30 day rolling period. The settlement rule is largely unchanged from the previous proposal, though the threshold for instituting it has been lowered.

2. Changes to Settlement of Imports and Exports Based upon RTD

Support Settling Intertie Convergence Bids at the Real-Time Price

Though PG&E does not support making changes to physical HASP settlements at this time, we would be supportive of any mechanism intended to eliminate the ability for convergence bids to unduly profit from the differences between HASP and RTD prices. One way of achieving this limited objective would be to settle all intertie virtual bids at the real-time price, rather than the HASP price.

PG&E acknowledges that this change could partially reduce the effectiveness of intertie convergence bids to hedge physical imports and exports. However, a similar less-than-ideal separation could also occur if real-time convergence bidding settlement were paired with Pay as Bid, as suggested by the CAISO. For example, a participant may have an import bid awarded at \$50 due to an indicative HASP price only to see the "true" real-time price settle at \$75. Under this scenario, the physical import would get paid at its bid price (\$50) while the same market participant could have an exposure for \$75 due to a reversed virtual supply bid. Similarly, a market participant could have an exposure related to a virtual demand bid if the "true" real-time price settled below the indicative HASP price.

For the reasons noted above, PG&E sees no overly strong argument to link settling intertie convergence bids at the real-time price with similar changes to physical transactions. Even if this change in convergence bidding was accompanied by a pay as bid physical settlement, there would be a potential disconnect between the two products.

Oppose Pay As Bid and Bid or Better Options for Physical Transactions at This Time

As noted in our introductory comments, PG&E is concerned that making changes to how physical transactions are settled at the interties could incur significant implementation costs and potentially create unintended consequences. Meanwhile, the level of the RTIEO has dropped precipitously over the last several weeks due to CAISO's efforts to eliminate systematic

differences between HASP and RTD. Assuming these market improvements continue to reduce the magnitude of the RTIEO, implementing a costly and complex solution would likely not be cost-effective. PG&E has laid out its expectations for cost benefit analysis in comments for the Renewable Integration Phase 2 Stakeholder process¹. Going forward, PG&E has a limited appetite for market enhancements that are not specifically supported by a cost benefit analysis.

Beyond the concerns regarding implementation costs, both Pay as Bid and Bid or Better present potentially serious downsides related to market efficiency. Under a Pay as Bid auction design, market participants are incentivized to bid what they believe the market clearing price will be rather than their underlying costs. This results in the clumping of bids around a relatively small value and a reduction in the elasticity of the supply curve. The Bid or Better mechanism has a serious flaw when the indicative clearing price can deviate from the final clearing price. This opens up the possibility for market participants to execute a type of wash trading where they attempt to bracket the market clearing price with offsetting supply and demand bids. Assuming they can effectively bracket the clearing price, any change between that clearing price and the final settlement price can result in a profit for providing no tangible service to the market.

Support Settling Physical Deviations from HASP Awards at the Real-Time Price

If the CAISO decides against revamping the settlement of all physical HASP transactions, PG&E supports making the incremental change to settle any deviations from HASP awards at the real-time price. This will better align the financial incentives of deviating from a HASP schedule with the true impact it has on the real-time market.

3. Changes to the Cost Allocation of RTIEO

Propose the CAISO Implement a Two -Tiered Allocation of the RTIEO

The RTIEO uplift is created by a number of different market participants and warrants a cost allocation that better reflects this reality. Some portion can be directly attributable to physical resources that deviate from their day-ahead or hour-ahead schedules. Another portion can be created through offsetting virtual awards as discussed in this paper. For these two causes, it makes sense to allocate any associated uplift directly to the appropriate party. Therefore, PG&E is supportive of a cost allocation tier that allocates costs based on causation.

However, PG&E also recognizes that a variety of other drivers, not directly caused by market participants, also contribute to the RTIEO. These include ramping of intertie resources over the beginning and end of each hour, differences in calculating average HASP and RTD prices, and general misalignment of CAISO models between the HASP and RTD markets. For this category of "normal market operations" it makes sense to spread the uplift more broadly in a second allocation tier similar to GMC.

Though not fully developed at this point, the goal of this framework would be to assign some portion of the RTIEO based on cost causation and to allocate the remainder via a predictable charge to all market participants (physical and virtual).

¹ Comments of PG&E. Renewable Integration Phase 2 Discussion Paper. April 29, 2011: <http://www.caiso.com/2b72/2b72e0f919d20.pdf>

4. Enabling Convergence Bidding between HASP and RTD

Oppose This Change to Convergence Bidding Based on Reliability Concerns

PG&E has serious concerns that this proposal could compromise reliability and cause greater volatility in the RTD market. It is our position that HASP should be treated as a fully integrated component of the physical real-time market that assures reliability through the dispatch of in-area and out-of-state resources. Inappropriately optimizing HASP using some measure of virtual supply and demand would misalign market-driven out-of-state dispatches with imminently needed reliability-driven in-area dispatch requirements. Further consideration of this alternative should be dropped.

5. Emergency Filing of Settlement Rule

Continue to Support Emergency Implementation of Settlement Rule and Other Changes

In accordance with our previous comments, PG&E continues to support the emergency implementation of a settlement rule if the portion of RTIEO related to offsetting virtual awards exceeds a specific threshold. PG&E also fully supports the changes made to the threshold since the last proposal.