

Comments of Calpine Corporation On the CAISO's Flexible Ramping Products Third Revised Straw Proposal

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Submitted by	Company	Date Submitted
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Summary

Calpine continues to support the development of a flexible capacity product to ensure that the CAISO has sufficient ramping capability in the 5-minute dispatch timeframe to meet the challenges of variability, both present and future.

The 3rd revision provides substantial additional detail and Calpine provides comments primarily on bidding rules and settlement.

Bidding Rules:

Calpine appreciates the details provided in section 2.1 of the third revision. In this section we address several concerns with those rules and discuss a related matter from Section 2.2 (relaxation conditions).

2.1.1 Flexible Ramping Bid Cap

While Calpine objects to all price and bid caps, we agree that the cap should be set in a manner that mirrors comparable products and therefore do not object to the \$250/MW proposal. We also understand that a rational bidder might incorporate the possibility of energy dispatch into its bid and that this would result in FRP bids rationally below that of, for instance, spin. However, Calpine does not understand the need for, and opposes a rule that FRP MUST be bid lower than any spin bid.

2.1.2 and 2.1.5 Address the Same Issue Differently

Each of these proposals for RT re-bidding attempt to limit a generator's ability to change RT energy bids after a DA capacity award is made. Section 2.1.2 targets DA awards from self-provided FRP and section 2.1.5 addresses other DA awards of FRP.

First, Calpine appreciates the CAISO's recognition that circumstances can and do change between DA and RT. As such, RT bids should be able to be modified. Further, Calpine understands the CAISO is concerned about unconstrained re-bidding of FRP energy in RT.

Second, our review of these sections indicates that they approach the same issue quite differently. Section 2.1.2 proposes a fairly straightforward behavioral rule on re-bidding (RT bid must be the lesser of two times default bid or \$300.) It does not offer a behavioral rule for downward capacity. Section 2.1.5 offers an ill-defined proposal with resources providing a range in which they would re-bid in RT. The range includes both FRP up and FRP down.

Calpine supports simple, transparent re-bid rules that apply to all similar situations. The rules should be flexible and should reflect market conditions including the possibility that when FRP is need most, energy value and costs may have increased when compared with DA conditions. We encourage the CAISO to discuss in more detail the proposal for a pre-arranged bid range, as we do not understand how such a range can be established before DA awards are known.

2.1.4 Factoring in Energy Costs

This section does not particularly address a new bid rule, but rather, proposes a modification to submitted bids to be used in the optimization and FRP procurement. The proposal suggests that for capacity bids that are combined with extreme energy bids, the CAISO will include a portion of the energy bid to the capacity bid prior to procurement. For instance, a \$10 capacity bid and a \$1000 energy bid would be viewed as a much higher capacity bid ($\$10 \text{ plus } .025 * \$1000 = \$35 \text{ revised bid}$).

Calpine does not object to this proposal conceptually as a substitute to a stochastic optimization. However, we do not understand the basis of selecting the proposed limits. Rather, Calpine would suggest that the CAISO apply the adjustment to bids which exceed 90 percent of the then-current bid caps.

2.2.2 Relaxation Prices Are, Well, Just Wrong

As Calpine understands it, this proposal creates parameter prices which would allow the CAISO to relax the FRP constraint. The values proposed in this "demand curve" create prices at which the CAISO would no longer be obligated to purchase FRP, and if possible, defer such to RT, or take the risk expected variability would not occur.

Calpine objects to this proposal in several respects. First, the relaxation is entirely inconsistent with the CAISO's claims that FRP is for operational purposes. If you need it to protect reliability, you need it. Calpine would not

suggest it be purchased at ANY cost, but the relaxation prices appear to reinforce Calpine's repeated assertion that FRP is as much price mitigation, as it is reliability insurance.

Second, the relaxation prices are, *stunningly*, lower than the proposed bid cap. The interaction of these two elements would suggest in simplest terms that any bid over \$100 could be rejected, even though it is less than one-half of the bid cap. In a slightly more complicated view, this interaction suggests that even a \$10 FRP bid, if combined with \$100 in opportunity costs, could be rejected. If the CAISO truly believes that this proposal is reliability insurance, the relaxation parameter for FRP should be coordinated with the energy balance constraint parameter value of \$1000.

Finally, the demand curve is proposed to be a step function. While Calpine may not fully appreciate the proposal (which is one sentence in full description) we do not understand the need for, or relevance of multiple steps. Indeed, if the first relaxation target is met, it would appear that the constraint will no longer bind the CAISO to any procurement obligation.

Settlements:

Calpine continues to object to the CAISO's change in which selection of FRP in RTPD is only advisory and units are only compensated in RTD (even if they are paid an RTD opportunity cost if economic, but held back for subsequent intervals). Notwithstanding the CAISO's attempt to distinguish (2.3.2) between "conversion" and "substitution", FRP capacity in RTPD is largely identical to non-contingent spinning reserves. Spin is paid if it is selected for capacity in RTPD and then also paid if it is dispatched in RTD. Fungible (convertible) products should be paid the same and FRP should be paid for both capacity AND energy.

Thank You