

## WPTF Comments on Uneconomic Adjustments and Parameter Tuning

October 6, 2008

WPTF is pleased to offer the following comments on the design elements related to uneconomic adjustments and parameter tuning. Our comments are organized in conjunction with the topics presented at the CAISO/MSM meeting on September 26, 2008.

In general WPTF is concerned about the impact on price signals that will result from several of the CAISO's recent proposals. A key benefit to MRTU is the ability to put prices on actual system constraints and conditions. To the extent that prices do not reflect these constraints and conditions the CAISO's proposal will diminish those benefits. Specific details of our concerns in this regard are addressed below.

WPTF is further concerned given that the presence of uneconomic adjustments (which are, in reality, an additional layer of market mitigation) provide energy buyers with a regulatory protection against all instances of high prices. Because mitigation measures, including uneconomic adjustments, do not distinguish between mitigated prices that are warranted based on some demonstration of market power, for example, and mitigated prices that occur even when system conditions support the pricing outcomes, load is assured that high priced market outcomes will not occur, and therefore the incentives to hedge their risk is eliminated. Hedging is about managing the potential extremes that can occur; when the threat of any extreme outcome is removed, there is no need to hedge. Therefore, even if the uneconomic adjustments only occur in 0.5% of the hours the uneconomic adjustments greatly diminishes the need for forward hedging. This in turn undermines incentives for forward contracting that can support investment in new and existing resources and at the same time it creates a need for additional regulatory intervention to address the lack of market-based investment and the resulting reliability issues.

It is important to note that using pricing run penalty prices that more closely match the scheduling run penalty does not benefit suppliers per se, nor does it harm loads per se. As is evidenced by the CAISO's examples, generators in supply pockets can be harmed by a pricing run price of \$1500, and with such a price, loads would pay a lower price for the energy from such generators. But who wins and who loses is not the only issue, nor is it the most important issue when examining this design choice. Rather allowing prices that properly reflect system conditions to flow through to the market will be the strongest driver for moving to a system that is ultimately more efficient, and one in which market prices guide investment and operating decisions by both suppliers and electricity consumers. Administrative remedies that hide the real cost of system constraints perpetuate existing inefficiencies and require ongoing regulatory intervention through such means as uneconomic adjustments.

Lastly, WPTF strongly encourages the CAISO to focus on its real underlying market design issues such that all parties can work toward policies that address these underlying issues.

WPTF provides more specific feedback in the topical areas that follow.

### **MRTU AS Pricing under Scarcity Supply:**

WPTF continues to oppose the CAISO's proposed treatment of Ancillary Service (AS) uneconomic adjustments.

First, WPTF finds the CAISO's interpretation of FERC's 2006 Order regarding limited scarcity pricing to be an awkward extension and one that is counter-productive. In short, the CAISO is interpreting FERC's response to the CAISO's specific treatment of the energy pricing under reserve shortages as somehow limiting the possibilities in other areas such as ancillary service prices. WPTF encourages the CAISO to focus on a robust design for the Ancillary Services that meets broader policy objectives rather than allowing the design to be constrained by prior orders. The CAISO seems to be concerned about physical withholding. If this is the case then the CAISO should address physical withholding rather than setting the penalty price to zero. However, the CAISO also seemed to indicate that even a RA AS must offer would not alleviate its concerns and that it would still propose a zero penalty price. If this is the case, then it appears the CAISO has some additional concerns it has not shared with market participants. We encourage the CAISO to share its concerns fully and openly with market participants, both in the interest of transparency and so that affected parties can be part of the solution.

Until the CAISO explains why it needs a penalty price of zero for AS, WPTF is concerned that the "real issue" here is that the CAISO is seeking a wide arsenal of tools that will allow it to manage market outcomes, especially in the early stages of MRTU deployment, so as to avoid high prices. However, the CAISO does not seem to be drawing any real distinction between erroneous prices that are due to software tuning or algorithm issues and high prices that may occur due to supply and demand fundamentals. Concerns about the MRTU software functionality should not be addressed by suppressing market outcomes, and it also is unclear that prices that are a result of supply and demand fundamentals require suppression beyond what has already been approved by FERC in the form of bid caps and local market power mitigation.

Second, WPTF objects to the presumption that the last economic bid that was available is somehow related to the proper pricing signal when that economic bid was insufficient to satisfy the supply. An example may be illustrative. Assume for example, the last economic bid available for the supply of an AS service was \$225/MW. That \$225 price signal has no relationship to the actual value of satisfying the requirement of the service if the scheduling run penalty price of the AS is \$2500/MW and if the \$225/MW price opportunity was insufficient to produce the supplies needed. All that is known under this situation is that \$225 *underestimates* the value of fulfilling the AS requirement. To liken it to the case where the \$225 bid is marginal and satisfies the requirement and thereby establishes a shadow price of \$225 is simply wrong.

In this sense the CAISO's proposal errs in presuming that the value of the service is reasonably derived from this last (albeit insufficient) bid.

Until the CAISO fulfills FERC's mandate to implement reserve scarcity pricing no later than 12 months after MRTU implementation, at a minimum the CAISO should set the capacity price of the AS service at the service bid cap if the AS procurement targets cannot be met. This would at least provide a minimal indication, reflected in prices, that supplies were insufficient.

### **Energy Limits in RUC**

WPTF supports the enforcement of the energy limit constraint in RUC. WPTF has no particular objection to the penalty price of \$1000 at this time but wishes to reserve judgment until the balance of the parameters have been proposed.

### **Pricing run parameters on Transmission Constraints**

WPTF is pleased that the CAISO explained how the design allows transmission constraint prices to be set at the higher of the last taken economic shadow price or the scheduling run price. WPTF was unaware that the software worked this way and would like further technical information (e.g., formulae showing this outcome) such that we can reinforce our understanding.

Notwithstanding that request, WPTF is concerned about the proposed change to lower the pricing run price of transmission constraint violations from \$1500 to \$500. Perhaps a review of the basics is needed. Given the CAISO's proposed penalty price of \$5000 used in the scheduling run, if uneconomic adjustments are needed to resolve constraints then by definition there is no economic solution available at a cost of less than \$5000. (As any economic resolution would have been accepted, and the uneconomic adjustment avoided, should the economic adjustments have cost less than \$5000.) By definition then this constraint is worth at least \$5000 to the system to resolve.

For the CAISO to suggest this pricing run parameter change from \$1500 to \$500 is needed indicates to WPTF that the CAISO expects there to be a significant number of instances where the last available economic shadow price would exceed \$500 but be less than \$1500.

Ultimately the CAISO's proposal will reduce the effectiveness of the price signals. Because of this WPTF objects to this further reduction of the pricing run price to \$500, on top of an effective reduction from the scheduling run value of \$5000. If the benefits of MRTU are to be realized then prices have to be differentiated based on the value of a change in the system (higher load response, well-sited generation, transmission upgrades). Muting the prices will distort these signals, stymie market/system improvements, and remove incentives for LSEs to prudently hedge market risks. (Note that prices LSEs see are already significantly muted given the LAP-level aggregated pricing.)

In summary, the CAISO should not lower the pricing run penalty, as doing so will mute transmission congestion price signals potentially to the extent that they become ineffective signals altogether.

### **Price Caps and Price Floor**

While WPTF certainly wants a successful implementation of MRTU, and while WPTF is also concerned about misperceptions related to outlier LMPs, WPTF has significant concerns about the CAISO's proposal to implement a price cap and floor. Our concerns stem from the following:

- The market power mitigation design was established through extensive stakeholder discussion and deliberations by the MSC and FERC in 2006. One key element of the final design was the recognition that while *bids* were capped, and bids from units needed to address local constraints may be mitigated, nodal *prices* were not capped, and nodal prices would reflect the price of serving demand in constrained areas while being based on the capped/mitigated bids. The CAISO proposal reverses this fundamental approach to mitigation, it appears to be contrary to established FERC policy on this matter, and is fundamentally unwarranted.
- The rationale for this unprecedented form of mitigation appears to be based on extremely limited real information. The CAISO policy makers point to “extreme pricing” results from the market simulation. In some instances verbal explanations have been provided about those prices. In very few cases have detailed explanations been captured in writing by the CAISO staff so that market participants can carefully assess, the potential need for a cap, its likely consequences (intended and unintended) and the price risks for themselves. Further, given that this proposal has only been introduced after the conduct of the market simulation rather than before prices were being published, there is a sense that the policy is in response to the market simulation prices. This reinforces WPTF's concern stated that much of the uneconomic adjustment policy and procedures are based on concerns about the reliability, stability and configuration of the MRTU software. If so, such concerns should be addressed directly and not through additional forms of mitigation. No policy should be considered without much more data about the occurrences, level of pricing, duration, cause, and market impacts.

Pricing discussions offered by the CAISO (as part of the market simulation processes and at the uneconomic meeting) related to the high prices have all indicated either that (1) the high/low price was accurately reflecting a market condition – usually a condition that was intentionally introduced by the conduct of scenario reflecting extreme physical or market conditions, or (2) the high/low price resulted from MRTU variables that are continuing to undergo tuning and are ultimately expected to not produce such prices. It is not appropriate to constrain prices for either of these drivers. To constrain prices for events that fall into the first category could potentially remove the incentives for generation, demand response and system upgrades that could be made to avoid the high/low prices in the future and could also discourage forward contracting and hedging. That would be a counter-productive outcome in order to protect against some market price result that may otherwise be de minimus.

- There is no evidence of market power or no other indication that constraining prices is appropriate.

The MSC raised the issue of whether such a cap design can mirror the value of lost load. WPTF would be pleased to consider such an exchange from this perspective. However, it seems inappropriate to consider constraining prices at \$2500, but to assign a penalty price in the scheduling run for load significantly above this point. If there is a value of lost load analog to any price cap design than it would seem to warrant consistent treatment across the CAISO and not be subject to a “pick and choose” approach.

### **Honoring ETC/TOR Rights**

WPTF believes that CCSF’s proposal to settle ETCs using the same load distribution factors as the DLAPs offers the most efficient and effective means to resolve the priority conflicts associated with the ETCs and parameter tuning. While the CAISO has offered a mechanism for a financial reversal of congestion costs it seems that ETC holders may still be harmed under the CAISO’s proposal as a result of other costs associated with schedule reductions. WPTF does not believe moving from nodal ETC settlement will otherwise have a substantive impact on the MRTU markets. WPTF therefore believes this to be a superior approach over other proposed remedies.

### **Maintenance of Parameter Values:**

WPTF commends the CAISO for its decision to maintain the parameters through the BPM process rather than the Operating Procedures. WPTF encourages further consideration of whether the parameters should reside in the tariff given that they affect the rates.