

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



**UNECONOMIC ADJUSTMENTS AND PARAMETER TUNING
CPUC STAFF COMMENTS
October 9, 2008**

CPUC staff appreciates the complexity involved in determining the proper penalty price parameters for both the scheduling and pricing runs in MRTU. We would like to thank the CAISO staff for their diligence in and dedication to resolving these issues and their willingness to accept stakeholder input.

1. The CPUC staff is generally supportive of changing the Pricing Run parameters for Energy Imbalance and Transmission Constraints from \$1500 to the energy bid cap. As the CAISO staff has stated several times in stakeholder meetings, there is probably no “right number” to use for these parameters. It is CPUC staff understands that parameters must be selected for two reasons: to speed up the solution of the MRTU model and to place a proxy economic value when no explicit economic value exists. Therefore, the argument that setting the parameters for energy imbalance and transmission constraints at the energy bid cap instead of at \$1500 distorts economic signals seems tenuous because the penalty parameters are administratively set and not the result of actual market conditions. It does suggest that CAISO must consider the impact of slight shifts in the priorities given to certain constraints, but it does not indicate that the economic signals that are being sent are in any way “wrong.” Furthermore, in the most recent proposal CAISO demonstrates that the tradeoffs that come about from this pricing change have been considered and are acceptable. As the most recent CAISO proposal showed, the divergence between the scheduling and pricing runs is within a range that CAISO operators have found to be insignificant and in many cases negligible.

Additionally, this change seems to be more in line with the applicable scarcity pricing tools that will be used at MRTU start-up. If CAISO sees the need for creating scarcity pricing tools beyond the limited scarcity pricing that will be used at MRTU start-up and the AS Scarcity Pricing mechanism that will be used one year after MRTU start-up, then additional stakeholder processes can be used to determine if these penalty parameters should be set at a level greater than the energy bid cap and, if so, at what level.

2. The CPUC staff is generally supportive of adopting energy price floors/ceilings. However, the use of an LMP floor/ceiling should be used as a protection from extreme prices, and not as a solution to the underlying causes that can lead to such prices. As MRTU starts up, a great deal of uncertainty regarding the IFM and

RTM markets performances and prices will remain. Setting price floors/ceilings provides protection to ratepayers if the IFM or RTM result in extremely high LMPs due to unexpected market flaws or other causes. While the floor/ceiling protects ratepayers in these cases, CAISO still has an obligation to determine the cause of the extreme prices and implement a solution if the prices are the result of something other than a competitive market outcome. After MRTU start-up, if market results show that ratepayers are adequately protected by either competitive markets and/or well functioning market power mitigation, then CPUC staff is willing to consider revising, or even eliminating the price floor/ceiling. CPUC staff believes the removal of a floor/ceiling may be considered in conjunction with LSEs settling at a more granular level. The CPUC staff would like additional information regarding how this floor/ceiling will apply to AS markets.

CPUC staff urges the CAISO and stakeholders not to downplay the importance of high price signals. A high LMP at a given node may have very little impact on the overall LAP price but, for a market that stresses the importance of price signals, the proposal seems to place little relevance to extreme LMPs (pages 7-10). Though initially these LMPs may appear anomalous and short-lived, they do send a market signal. That signal is that there is a condition at that node that will allow for very high LMPs, and it should be determined if this is the result of a legitimate scarcity of transmission and/or generation resources at this location, or market flaw or manipulation. For those attempting to manipulate prices the question becomes can this high LMP be maintained, and if so, how. As stakeholders pursue the implementation of MRTU there must always be an eye towards the future. In future phases of MRTU, there will be more granular settlements by LSEs. Not every anomalous price needs to be fixed immediately; however, as settlements increase in granularity, these price signals will increase in importance. To this end, it is important that CAISO, the DMM, and all market participants recognize that every five-minute price has significance in MRTU and should not downplay the importance of individual LMPs in the long run.

Furthermore, CPUC staff would like to discuss potential price caps in the RUC market. Currently, the CPUC's RA program is responsible for procuring sufficient resources for the IFM, RUC, and RTM. However, although LSEs are responsible for procuring 115% of their peak load, the CAISO's RUC market is seeing RUC prices that exceed \$200 in market simulations (and sometimes in excess of \$400), sometimes with no apparent correlation to high energy or AS prices. CPUC staff is concerned that if these high prices are consistent, predictable, and do not represent actual capacity scarcity, such prices could lead to several deleterious outcomes. The first negative outcome is a reduction in the amount of existing capacity that is offered into the CPUC's RA market. New capacity may still seek the greater financial stability provided by multiyear contracts, but existing units with limited fixed costs will be less likely to sign RA contracts. This will lead to increased costs for capacity procurement, or an increase in the use of ICPM and Exceptional Dispatch if LSEs fail to meet their RA procurement requirements. Another negative outcome would be reduced

volume in the IFM and increased volume in the RTM, if LSEs fail to meet their RA procurement requirements. CPUC staff is concerned that a pattern of high RUC prices not related to actual scarcity of capacity may lead to reduced RA contracting in the long run. This allows generators to bid exceptionally high in the IFM, waiting for RUC procurement and then bidding more in line with costs into the RTM. The increased volume in the RTM could result in severe scheduling problems and decreased reliability. If the RUC prices are due to actual scarcity, then the CAISO should communicate to the CPUC that they see a need to establish an appropriate Local Capacity Requirement. This would allow the locational importance of a unit to be fully recognized through the CPUC's RA market and help prevent extreme RUC prices. Therefore, CPUC staff urges CAISO to seek ways in which the RUC prices can be limited so as to not interfere with the CPUC's RA program or hinder reliability.

3. CPUC staff is generally supportive of enforcing energy limits of use limited resources in RUC. Given the concerns voiced in CPUC staff comments to item 2 above, CPUC staff requests additional information detailing how such an amendment will impact the procurement of RUC. For example, could such use limits prohibit units from bidding in hours in which they were not selected in RUC? Would this change the amount of capacity that CAISO would seek to procure in RUC in either a selected hour or a given day? If so, will the amount of capacity procured in RUC increase or decrease?
4. CPUC staff understands that the CAISO staff is considering providing financial firmness to ETC/TOR and that the CAISO is considering using the CRR balancing accounts to provide this firmness. Though the CPUC staff understands the policy to honor ETC/TORs, the current proposal does not provide sufficient evidence to demonstrate that the cost of honoring these contracts should be done through use of CRR balancing accounts. CPUC staff is concerned that firming ETC/TORs by using funds from CRRs could create a revenue sufficiency problem for CRR accounts. Therefore CPUC staff seeks assurance that the CAISO can guarantee the revenue sufficiency of the CRR balancing accounts if this approach is taken, without further limiting the availability of CRRs to LSEs. Furthermore, proposals such as this would likely require a tariff change. Therefore, additional information is needed regarding this proposal even if CAISO anticipates that payments of this type will be minimal and infrequent.

When schedules need to be curtailed due to congestion, ETC/TOR holders should not be asked to bear the full cost of these curtailments. Therefore, CPUC staff encourages CAISO to further consider using the Load Distribution Factors, as suggested in the alternate proposal offered by Flynn RCI at the Joint MSC/Stakeholder meeting on September 25, 2008, and determine if it is technically feasible and how MRTU and CRR market outcomes would be affected.

The CPUC staff believes that CAISO cannot consider using the extreme ETC/TOR values that were examined in the Joint MSC/Stakeholder meeting on September 25, 2008. CAISO should not use penalty parameters to protect ETC/TORs that create large distortions in the energy market. The extreme LMP's, load curtailments, and shadow prices that resulted from these values are unjust and unreasonable. Though CPUC staff supports honoring ETC/TORs, it cannot support honoring them at all costs.

5. CPUC staff supports putting the penalty parameters for the pricing runs in the BPM. Placing these parameters in the BPM allows for transparency, a clear change management procedure, and the ability for CAISO to adjust the parameters quickly if needed. Though CPUC staff also supports putting the penalty parameters for the scheduling run in the BPM, CPUC staff remains open to placing the scheduling run parameters in the operating manuals.

CPUC staff also supports identifying parameters tied to the energy bid cap in the tariff. However, in the CAISO's current proposal there is no mention of where a price cap should be placed. CPUC staff believes any price caps, or formula relating a price cap to the bid cap, should be included in the tariff.

Christopher Clay/Legal Division; cec@cpuc.ca.gov
Karl Meusen/Energy Division; kkm@cpuc.ca.gov