

**CAISO Department of Market Monitoring
Comments on Proposed Options for Implementing a
Day Ahead Scheduling Requirement under MRTU**

May 7, 2007

The CAISO Department of Market Monitoring (DMM) provides the following comments to supplement the discussion of proposed options for implementing a scheduling requirement under MRTU outlined in the April 27, 2007 whitepaper (April 27 whitepaper) prepared by Market and Product Development (MPD). Due to the relatively expedited schedule on which this issue must be addressed by the CAISO, DMM is providing these supplemental comments at this time so that they can be fully considered by both stakeholders and CAISO staff in this process.

As a general comment, the April 27 whitepaper already incorporates the range of options and many of the pros and cons of these various options suggested by DMM as member of the internal CAISO team developing the whitepaper. However, DMM would like to reiterate some of its previous comments and recommendations regarding the enforcement of any scheduling requirements under Options 1 and 2. In addition, DMM would like to provide some additional comments and recommendations on the “trigger” proposed under Option 3, which would require that DMM monitor levels of underscheduling in the Day Ahead Market (DAM) and, if DMM determined that load underscheduling was having a significant impact on DAM market prices, Option 4 (A New Load Underscheduling Charge) would be implemented.

Enforcement of Options 1 and 2

The April 27, 2007 whitepaper indicates that under Options 1 and 2, SCs “would be subject to the Enforcement Protocols (EP) in the Section 37 of the MRTU Tariff, which is a general provision that participants comply with all provisions of the CAISO tariff.” (p. 9 and 10).

DMM notes that while the MRTU Rules of Conduct (Enforcement Protocols) do have a provision that requires participants to submit all information required by the tariff (for which there is a minimal \$500/day fine), the MRTU Rules of Conduct do not include any general requirement requiring participants to comply with all provisions of the CAISO Tariff. However, FERC’s rules may be read to have a general provision requiring compliance with FERC-approved ISO tariffs, with fines of up to \$1 million per day for any such violations. As modified after EPACT, Section 316A of the Federal Power Act states that “it shall be unlawful for any person to violate any provision of part II or any rule or order issued under any such provision.”¹

Meanwhile, pursuant to FERC’s previous orders and policy statements on market monitoring, ISOs may only seek to obtain tariff authority to impose penalties for completely “objectively identifiable” violations of tariff provisions for which there are very specific

¹ It is DMM’s understanding that a tariff is an “order” of the FERC, and thus tariff violations – including violations by both sellers and LSEs – are subject to such penalties.

penalty formulas in the tariff.² Once such penalties are established in the tariff, the ISO does not have discretion to waive or modify any of these penalties, but may only recommend that the FERC modify or waive a penalty due to “mitigating circumstances” through a formal filing with the Commission.

DMM believes that the lack of any discretion by the CAISO in assessing any formulaic penalty that might be established in the CAISO tariff for violations of any scheduling requirements established under Options 1 or 2 may make such an approach somewhat problematic for both participants and the CAISO. In addition, in the event that a specific penalty is established that is based on an LSEs Day Ahead bids/schedules relative to load forecast, the devotion of resources for the development of a satisfactory mechanism by which LSEs can submit those load forecasts will need to be revisited.³

Finally, DMM notes that any penalty established in the CAISO tariff that is based on a comparison of Day Ahead bids/schedules to forecasts submitted by LSEs may be subject to “gaming” and could be easily circumvented by under-forecasting load. Since such potential gaming of load forecasts would not constitute an “objectively verifiable” violation of the CAISO tariff for which a specific penalty is established in the CAISO tariff, the CAISO’s only recourse would be to refer any such activity to FERC under CAISO and FERC market rules requiring submission of Factually Accurate Information and prohibiting Market Manipulation (e.g. MRTU Tariff Sections 37.5 and 37.7, respectively). Under this scenario, any enforcement actions would then be within the sole authority of FERC.

For these reasons, DMM has suggested that if the CAISO believes some financial incentive to deter underscheduling should be incorporated into the CAISO tariff, that this be done through a settlement charge that is calculated based on a comparison of metered loads to load schedules (Option 4), rather than a penalty based on an SC’s load forecast under Options 1 or 2.

Option 3

First, DMM notes that this option would still require that the CAISO and stakeholders determine, in advance, what an appropriate level for any such underscheduling charge would be. DMM has noted that, in practice, it may be difficult to determine a charge that would be “just right” in addressing the Commissions’ concerns about underscheduling – without creating unintended or inefficient outcomes under other market conditions. Nevertheless, if the “scheduling charge trigger” proposed in the whitepaper were to be included in Option 3, the difficult task of determining the appropriate level of charge must be still be resolved as part of this current process.

² See *Policy Statement on Market Monitoring Units*, Docket No. PL05-1-000, Issued May 27, 2005 at ¶5 and ¶6.

³ As noted in the April 27 whitepaper, “[i]t is unclear whether or not the CAISO will have an effective tool available for LSEs to submit Load forecasts at the start of MRTU.” The whitepaper further states that “[t]he cost of this functionality is excessive and the time to implement this capability into SIBR could delay the MRTU project” and that “[o]ther lower cost alternative approaches, including use of a secure File Transfer Protocol (FTP), are now being evaluated.”

Second, DMM believes that, in practice, the proposed approach of having the “trigger” for a scheduling charge be based on a determination by DMM that underscheduling is having a significant impact on DAM prices is problematic for a variety of reasons:

- Under MRTU, any divergences between DAM and RTM prices may be driven by a combination of many different factors --- supply and demand bidding behavior, modeling errors or limitations in the DAM, HASP market behavior and outcomes, real time market bidding behavior, unscheduled flow, and generation uninstructed deviations, etc. The complex interactions between these factors is likely to make any attempt to isolate the impact of load scheduling and bidding practices on price divergences between the DAM and Real Time Market a challenging and controversial exercise.
- In the context of MRTU, for example, participants can be expected to adjust both supply and demand bids in the DAM on a daily basis in response to and in anticipation of market conditions – which could include the expected behavior of other participants. Thus, any analysis of a counterfactual change in scheduling/bidding behavior of LSEs may require assumptions about a change in behavior of suppliers and other market participants. Moreover, due to the sequential interrelated nature of the IFM, RUC, HASP and real time markets, analysis of a counterfactual change in scheduling/bidding behavior of LSEs in the IFM may require analysis of the resulting changes in the inputs and outcomes for each of these other markets. Due to the large number of assumptions that may need to be made to assess the impact of LSE bidding behavior on overall market prices and outcomes, such analysis is likely to be subject to extensive dispute and controversy.
- In addition, it should be noted that DMM currently does not have a foundation of existing models, tools and experience with MRTU market performance to conduct the type of complex analysis that would be necessary to ensure that DMM could differentiate the impact of market participants’ load bidding/scheduling behavior on market outcomes and prices from other market conditions and activities. While DMM expects to have a fully functional model of the MRTU software for off-line simulations, DMM cannot determine at this time if it will have the capability to perform the type of extensive, rapid analysis of “what if” scenarios that may be needed to determine and justify a finding that underscheduling behavior was having a significant (and detrimental, noncompetitive) impact on market prices.
- Other issues that would need to be addressed include the need to define and develop agreement on what constitutes terms such as a “significant” or “detrimental” impact on DAM prices, or “uncompetitively low” DAM prices, etc. For example, would such assessment be based on a comparison of DAM prices to prices under a hypothetical competitive market scenario, or to actual Real Time market prices? Would HASP market prices be considered in this analysis? Would comparisons be made based on LMPs only, or would they include other settlement charges incurred by LSEs for load met in the IFM, HASP, and Real Time markets?
- Finally, it should be noted that, in practice, the timeline needed to collect and analyze the data necessary to make a sufficiently definitive determination on the impact of any LSE scheduling/bidding behavior would make it likely that any such determination could only be made well into the first year of MRTU. For example, actual data on metered loads

and settlement charges incurred by LSEs are only available with more than a one month lag. In practice, DMM believes that if MRTU is implemented in February 2008, it may be well into – or even after – the summer months of 2008 before sufficient market experience may exist to assess the impact of LSE scheduling/bidding with the accuracy and confidence that would be needed in order to justify triggering a new underscheduling charge. Under this scenario, any such scheduling charge might be implemented for only a relatively short period of time prior to implementation of convergence bidding.

Given these challenges, DMM believes that if this option is pursued, it should be based on simple, very specific, and transparent metrics that may be imperfect in terms of precisely identifying the impact of load scheduling practices but are nonetheless agreed to be the best measure under the circumstances. Moreover, DMM believes that if this option is pursued, such metrics should be developed as part of this stakeholder process. DMM acknowledges that development of an appropriate set of very specific metrics in advance represents a significant challenge, particularly due to the fact that the CAISO and stakeholders do not yet have any experience under MRTU upon which such metrics might be based. Thus, such metrics may need to be relatively simple and may need to be designed to be trigger only if (a) excessive underscheduling occurs, and (b) it is having obvious detrimental market impacts, and (c) it is not due to any supply market power or other market design problems. However, these represent the same issues that would ultimately need to be dealt with after MRTU implementation.

Finally, should this “trigger” approach be pursued, DMM stands ready to work with the CAISO, its Market Surveillance Committee (MSC), and stakeholders to explore this option. DMM also notes that if this “trigger approach” approach is pursued, it could also be coupled with the first two options discussed in the April 27 whitepaper (i.e. as a trigger for Day Ahead bidding or scheduling requirement, rather than an underscheduling charge).