

Stakeholder Comments Template

Subject: Market Initiatives Roadmap – High Level Ranking Process

Submitted by	Company	Date Submitted
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The ISO is requesting written comments on the *Preliminary Results of the High Level Prioritization of Market Enhancements* published on the ISO website and discussed at the July 23rd, 2009 stakeholder meeting. This template is offered as a guide for entities to submit comments; however participants are encouraged to submit comments in any form. Comments are due by July 30th, 2009.

All documents related to the Market Initiatives Roadmap Process are posted on the ISO Website at the following link: <http://caiso.com/1fb1/1fb1856366d60.html>

Upon completion of this template please submit (in MS Word) to MIRoadmap@caiso.com. Submissions are requested by close of business on Thursday, July 30, 2009.

Please answer the following questions on the results of the high level ranking:

Calpine appreciates the opportunity to comment on the CAISO's High Level Ranking of Market Enhancements.

As an introductory comment, however, Calpine would like to stress its belief that while MRTU is implemented, *the market design effort is far from complete and it is not functioning entirely as anticipated*. We understand that there are improvement efforts underway which were considered in recent "Release Planning" processes. However, we think that there is a significant and ongoing need for prioritization of initiatives that improve Real Time market performance, that reduce the systemic need for Exceptional Dispatch and that reduce the incentives for Self-Scheduling.

We understand the need for consideration of the impacts of potentially increasing volumes of intermittent renewables. Indeed, Calpine is prepared to discuss the market products and performance issues necessary to meet the aggressive goals under consideration in the legislature. However, one statement in Section 3 of the July 13

ranking implies that the primary rankings are significantly weighted to renewables integration efforts¹.

Since there is nothing explicitly listed in the rankings that identify the “weight” that was assigned to renewables initiatives, it is not possible for Calpine to assess the appropriateness of the balance that has been drawn by the CAISO.

1. Should rankings be different for the initiatives that the ISO ranked “High” in the preliminary ranking process? If yes:

a) Provide your revised ranking of the initiative

b) Explain what factors led to your ranking decision

In general, Calpine does not object to the initiatives ranked “high”. We may quibble over the value of certain initiatives, particularly in a world of constrained CAISO resources. More particularly, we suggest that a more focused set of criteria be used to establish the final priorities. For instance, a simultaneous RUC and IFM may provide marginal benefit, but on balance does this initiative create the same value as say addressing ramping constraints?

Ramping constraints effect Real Time prices, the need for Exceptional Dispatch AND the ability to integrate renewables. In Calpine’s view, it is this kind of multiple benefit analysis that should drive the selection of high priorities. While we do not object to the use of subjective criteria, such as “improving overall market efficiency” for this very high level screening, we encourage the CAISO to use more discrete and causal attributes of each initiative to determine its final ranking.

2. Should rankings be different for the initiatives that the ISO ranked “Medium” or “Low” in the preliminary ranking process? If yes:

a) Provide your revised ranking of the initiative

b) Explain what factors led to your ranking decision

There are several enhancements that Calpine believes may improve Real Time performance and lessen Exceptional Dispatch that did not make the “high” list. Here are the items that we would promote to “high”

¹ “Renewable integration has become a significant factor in future market design initiative planning.” Page 4, section 3.

Extend Look Ahead for RT Operations Calpine believes that the industry-standard, minimum-down time for combined-cycle plants is 6 hours. This down time is beyond the 5 hour look ahead of the current RT market software, and requires routine manual intervention by grid operators and generation desks. Unit cycling could be further optimized with an extended look ahead.

Voltage Support Procurement Calpine concludes that a significant portion of the Exceptional Dispatch may be related to voltage concerns. Pre-IFM commitment of units for voltage support may be suppressing prices. Competitive procurement of this product could improve market performance.

Ramp Rate Enhancements Calpine believes that this “low” ranked item (4.2) should be included in the appropriately “high” ranked “Addressing Ramping Capacity Constraints” (6.8) item. Then, each of these items should be considered together with changes anticipated in the Multi-Stage Generating initiative. And the final item should be broadened to include the possibility of compensating units, not only for range (as they do now), but also for speed.

Initial Condition Management Calpine agrees with PG&E that modifications to the IFM should be made to recognize the operational condition of units in prior periods. Calpine’s fleet of combined cycle units offer highly valuable flexibility to either shut down completely, or operate at min load during deep off-peak hours. The IFM however has a “blind-spot” that does not allow full optimization.

3. Are there initiatives that were missing from the Market Design Catalogue (or the presentation)?

a) Describe the Market Design Initiative to be added

b) Rank the initiative and provide the reasoning for your ranking.

Forward capacity markets The July 13 preliminary results are entirely silent on the development of a compensation mechanism to provide the “missing money” created by mitigated and capped real time markets. The DMM 2008 Annual Report continues to confirm that the revenues provided by CAISO markets are not sufficient to support CCGT or CT investment.

Reduce Incentives for Self-Scheduling The CAISO analysis of Real Time price volatility has pointed to high levels of self-scheduling as one of several causes of very rapid (and some might say, irrational) price movements. There are several intended and unintended incentives that encourage the use of self-schedules as opposed to market bids. A detailed review of the incentives to self-schedule (like, for example, the IFM Load Uplift Obligation mechanism, or asymmetric bid caps/floors) should be reviewed for possible modification.

4. Do you have any comments on or suggestions to improve the annual roadmap process?

As above, use a more focused set of criteria to establish the final priorities.