

Stakeholder Comments Template

RI Phase 2 – Day-of Market 7/6/11 Initial Straw Proposal

Submitted by	Company	Date Submitted
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This template is for submission of stakeholder comments on the topics listed below, covered in the RI Phase 2 – Day-of Market 7/6/11 Initial Straw Proposal posted on July 6, 2011, and issues discussed during the stakeholder meeting on July 11, 2011.

Please submit your comments below where indicated. Your comments on any aspect of this initiative are welcome. If you provide a preferred approach for a particular topic, your comments will be most useful if you provide the reasons and business case.

Please submit comments (in MS Word) to phase2ri@caiso.com no later than the close of business on July 22, 2011

Brookfield Energy Marketing LP (Brookfield) appreciates the opportunity to submit the following comments to the Renewable Integration Phase 2 Day of Market Proposal. We have included a summary of our comments followed by responses to the questions listed in the stakeholder comments template.

- Moving to a 15 minute market for both internal and external resources in lieu of the current 5 minute market for Real-Time is a step backwards and will result in more disparities between forecast and dispatch and less price transparency. We support retaining the existing 5-minute market for internal generation and moving towards a 15 minute market for the interties only.
- We support the CAISO's general direction in developing a new capacity product (RTIS) but more discussion is needed in order to understand and define the requirements and how they link back to the 20% and 30% operational studies.
- The CAISO's proposals for HASP simplification requires more discussion and details before we can provide substantive comments. At this time, absent more information, we support leaving HASP as is until there is consistency across WECC to support 15 minute scheduling. The CAISO should continue to address operational improvements (e.g. forecast efficiency) which have already been defined to better converge the HASP and Real-Time prices.
- We support the CAISO providing bidding timelines closer to the operating hour such as the T-30 timeline proposed here. We also support more frequent schedule updates (every 5 or 15 minutes) for resources that can not reasonably forecast their usage for the window of unit commitment.

1. Please provide any comments on the ISO's proposed schedule, timeline, or process for this stakeholder process.

Due to the complexity of the issues and the level of detail that still needs to be worked through, it seems that producing a Draft Final Proposal for Day of Market changes by September 8 is a very aggressive goal. It is also difficult to provide comments on the real-time market changes without understanding the entire picture of what changes are proposed to the day-ahead market design and how it will all fit together. We encourage the CAISO to ensure to allow adequate time in the schedule for discussion and stakeholder review of the proposed design.

2. Are there additional goals or operational challenges that the ISO should be addressing through this stakeholder process?

Consider other products that could be developed from existing unpriced constraints. Also, consideration that products defined for the real-time market should likely have a bid based product in the Day-Ahead Market.

3. Please indicate whether your organization agrees with the guiding principles listed in the straw proposal. If not, please indicate why not. If you would like to have other guiding principles added, please describe those additional principles.

We generally agree with the guiding principles

4. Please provide your organization's views on any incremental ancillary services you believe are necessary to accommodate the intermittency of renewable resources.

It is clear based upon the CAISO's existing identified operational needs that the CAISO intends to address through the flexi-ramp constraint that there is a need for additional ramping capacity between the 15 minute and 5 minute dispatch of the real-time market. However, it is not clear if new products are needed or if existing services can be expanded to meet that need. More discussion and data analysis is needed to clarify the requirements.

5. Does your organization believe that Residual Unit Commitment should be performed more granularly than daily (i.e. on-demand RUC)? Is on-demand RUC needed if the 15 minute unit commitment, either in RTED (Option A) or RTPD (Option B) looks forward 8-10 hours?

Residual Unit Commitment exists to ensure that capacity is procured to meet the ISO's forecast of demand if higher than the cleared bid in IFM demand. Additional

needs should be met through new products or expansion of existing products, not through RUC.

6. Please provide your organization's views on replacing today's Hour Ahead Scheduling Process (HASP) for inter-ties with a simpler method that would not involve establishing separate hourly prices for the inter-ties and that would not include bid cost recovery. Please suggest proposals concerning what accommodations are necessary at the inter-ties to provide scheduling flexibility for western market entities.

We suggest leaving HASP as is until the rest of the WECC moves towards 15 minute scheduling. Once 15 minute scheduling is established, the interties can be cleared and settled on a 15 minute basis. This would reduce the real-time imbalance offset problem that exists today significantly. Although not enough detail was provided by the CAISO for us to make a final determination, it appears it would be better to leave HASP alone rather than go with the CAISO's proposed simplifications.

Whatever options are proposed for HASP modifications must provide for the option for market participants to bid schedule changes after the Day-Ahead market. Proposing a simplification that requires market participants to self-schedule seems counter to the CAISO's overarching goal to incent more economic bids in order to achieve more operational flexibility.

6. Does your organization prefer a two settlement market or a three settlement market? Please describe why.

We prefer a two settlement market because we don't see significant benefits to warrant scrapping the existing market design and creating a full HA market. We believe the existing market structure works to a large degree and problems with the existing HASP/Real-Time disconnect can be addressed through other modeling and operational improvements that have already been identified. That being said, we are not closed to the idea of a three settlement system if new information is brought to light that convinces us otherwise as to the benefits.

7. Please provide your organization's feedback on the concept of a 1 minute Real Time Imbalance Service (RTIS).

We would appreciate more discussion on the requirements that are driving the need for a 1-minute product. At this point it is not clear enough for us to provide more detailed responses to a-c below.

- a. Does your organization agree that with RTIS, regulation should be changed to a bi-directional service? Is one minute the correct dispatch interval for RTIS?

We do not have enough information at this time to determine if Regulation needs to change. This needs further discussion.

- b. How should RTIS be bid, selected, and dispatched? Should a mileage bid be used for dispatch with a market clearing mileage price determined each minute?

Until we more clearly understand the requirements we can not answer this question.

- c. Does your organization’s opinion on RTIS differ depending on whether Option A or Option B is chosen?

We need more information to make that determination. However, one difference that is clear is that there will be more of a need for RTIS under a 15 minute market than a 5-minute market.

- 8. Please comment on your organization’s preference for Option A or Option B with regard to the real time market. If neither option is feasible in your view, please provide input on how the real time market should be configured.

We prefer retaining the existing 5 minute internal market and moving to a 15 minute market for clearing the interties only when there is consistency across WECC. Clearing all resources on a 15 minute basis and eliminating the 5-minute market would be a step backwards as there would be larger mismatches between forecast and dispatch and less price transparency. Uplift would ultimately get worse due to the CAISO forecasting on a 15 minute basis, not revising on a 5-minute basis and waiting for a 1 minute ramping product. However the uplift would be masked as only a 15 minute market would exist and there would be no published 5-minute price.

Would 15 minute real time prices enable price responsive demand or demand response?

No comment

In Option A, with 15 minute RTED, what is your organization’s opinion about a 10 minute ramp period?

No comment

- 9. How often should renewable resources be allowed to schedule?

We support the CAISO’s proposal to allow resources opportunities to submit price offers and schedules closer to the operating hour as we see this as key to successful integration of intermittent resources. However, it seems that the ability to

update schedules for operational purposes close to real-time should be limited to resources that have a business case for why they can not reasonable forecast for the window of commitment whether that be hourly or on a 15 minute basis.

The CAISO also needs to clarify what they mean by schedule in this case. Does this mean price offers and self-schedules or just self-schedules? It is not clear.

- a. In Option A does every 15 minutes make sense?

No comment

- b. In Option B should renewable generation be able to schedule every 5 minutes, 15 minutes, or some other time interval?

Resources that have a business case for why they can not reasonably forecast for the window of commitment whether that be hourly now, or possibly 15 minutes in the future, should have the ability to provide updated schedules as close to real-time as is operationally feasible for the CAISO.

- c. Does it make sense to limit this scheduling opportunity to only renewable resources, or should it apply more generally? Who should be able to schedule more granularly than hourly?

Please see response to b. above.

10. Please provide any other comments your organization would like the CAISO to consider through this initiative.

Thank you for considering our comments.