



Stakeholder Comments Template

Day-Ahead Market Enhancements Phase 1 Initiative

This template has been created for submission of stakeholder comments on the third revised straw proposal that was published on February 28, 2019. The proposal, Stakeholder meeting presentation, and other information related to this initiative may be found on the initiative webpage at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/Day-AheadMarketEnhancements.aspx>

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on March 21, 2019.

Submitted by	Organization	Date Submitted
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Please provide your organization’s comments on the following issues and questions.

1. Fifteen-Minute Granularity Design Features

Please provide your organization’s feedback on the fifteen-minute scheduling granularity features topic as described in section 2 of the proposal. Please explain your rationale and include examples if applicable.

- a. The Initiative Needs a Review of Benefits and Implementation Costs, and a Schedule for Systems Tests

The purpose of this initiative is to recognize that intra-hour ramping occurs and to improve unit commitment and resource schedules in the day-ahead (DA) market so that the 15-min market does not have to resolve the granularity difference between the current hourly DA market and the 15-min real-time market.¹ As CAISO has documented, even with a perfect DA forecast the 15-minute market results in significant schedule changes due to intra-hour ramping that occurs. With

¹ CAISO, *Day-Ahead Market Enhancements Phase 1: Fifteen-Minute Granularity Third Revised Straw Proposal*, February 28, 2019 at 4.

a unit commitment and resource schedule that better reflects ramping needs, hopefully, this will reduce 15-min market price volatility and therefore reduce costs. The CAISO mentioned at the stakeholder meeting that some import hydro power could be scheduled on a 15 min basis in the day-ahead which would better reflect evening ramping conditions, but currently, they are scheduled hourly in the day-ahead and not able to change their schedule in real-time. By scheduling these import hydro resources on a 15-min basis in DA it would contribute to ramping service that exists in real-time.

CLECA supports continued investigation of the possibility implementing of a 15-minute day-ahead market as it could lead to more efficient use of resources and reduce costs to customers. However, CLECA has two concerns.

The first concern is a lack of documentation of the estimated benefits of transitioning the day-head market to 15-minute intervals versus the implications for costs of both increased processing costs and settlement system changes. The CAISO informed stakeholders that the current design would still be an hourly commitment because it is currently not possible to solve the optimization within required timeframe. As a result, some of the intended benefits may not be achieved. The CAISO should perform a quantitative estimate costs and benefits of the proposal. The process to quantify benefit may discover benefits that have not been currently recognized. The benefits evaluation should look at the risk of increased bid cost recovery since hourly unit commitment is not aligned with the 15-minute dispatch.

The review process should also consider less costly options, such as additional ramping constraint in the hourly optimization. It is CLECA's understanding the Midcontinent Independent System Operator applies a ramping constraint in their DA market. The CAISO should evaluate a similar approach and determine the feasibility and if it would obtain many of the same benefits.

The second concern is a lack of discussion regarding of testing and validation processes given the significant change to the DA market. The proposal is targeting a fall 2020 implementation without any discussion of the testing and

validation of the new market design. Because most of the financial settlement in the CAISO markets occurs from the day-ahead market results², it is imperative to get it right. In addition, the CAISO mentioned that many charge codes would be impacted. Therefore, the settlement systems are another process that requires testing before implementation; the need for testing includes both the CAISO and the scheduling coordinators that must update their systems. The next proposal should outline a testing and validation schedule for the market operations and settlement systems. The CAISO should draw upon the testing that was used for the Market Redesign Technology Update, the implementation of FERC order 764 for intertie scheduling, and the testing before a new member can join the Energy Imbalance Market. Until these tests are passed successfully, the fall 2020 implementation date should be viewed as a goal, not a deadline.

b. The Proposal for Sub-hourly Bid Curves is not Justified

The current proposal is to allow separate bid curves for each of sub-hourly (15-minute) intervals, but this does not appear necessary to obtain the aforementioned goals of DAME. This proposal may lead to longer calculation times to determine optimal unit commitment, which the CAISO has mentioned as being an issue for the proposal. The proposal mentions the justification is due to the possibility of intra-hour changes in natural gas supply as requested by schedule coordinators.³ Based upon CLECA's review of testimony submitted in the applications of SoCal Gas and San Diego Gas and Electric Company regarding Low Operational Flow and Emergency Flow Order Requirements⁴, the claim of intra-hour gas prices changes is unsupported. CLECA reviewed testimony of Brian Theaker of NRG Power Company.⁵ Mr. Theaker describes significant gas price cost changes that can occur from the DA market to the real-time, but he does not mention whether there are sub-hourly cost changes to natural gas supply as gas is purchased on a daily basis. Furthermore, Mr. Theaker states, "an OFO

² The real-time markets are incremental changes from the prior market award.

³ Proposal at 12.

⁴ CPUC A.14-06-024 and A14-12-017.

⁵ Theaker, Brian D. Prepared Testimony of Brian Theaker on Behalf of NRG Power Marketing LLC, January 29, 2019. See pages 4-8.

[operational flow order] requires that parties supplying or consuming gas balance their gas supply with their gas consumption within the tolerance imposed by the OFO (typically, 5%) on that OFO day.”⁶ Therefore, while gas prices can change on a daily basis, or even during the middle of the day when an OFO occurs, there does not appear to be support for bid prices to change on an hourly basis due to gas prices in a day-ahead outlook.

In addition, from a day-ahead perspective, it is also unclear how other opportunity costs would change every 15 minutes for the energy price bidding. This proposed change may also allow for more opportunities for gaming bidding behavior and contribute to unexplained volatility in the DA market, which can have significant financial impacts.

CAISO also plans to make this sub-hourly bid curve option available in the 15-minute and 5-minute markets.⁷ If there is an OFO for gas supply which changes the outlook for gas prices due to possible penalties in real-time, the schedule coordinator would not be able to update the bids until 75 minutes prior to the operating hour. Therefore, submitting four bid curves for the hour at T-75 minutes is not necessary. CLECA is concerned that the downside risk of gaming opportunities may be greater than the any improvement in dispatch by attempting to reflect changes in marginal cost every 15 minutes. If changes in intra-hour marginal costs currently exist, then schedule coordinators have been able to manage these risks. It does not appear this change would improve unit commitment and schedule awards, and therefore reduce transaction costs. As a result, CLECA does not support this change without additional evidence demonstrating that it would improve market results.

- c. Allowing RA Resources to have a non-Zero Availability Price Bid for Residual Unit Commitment is Unsupported

It is CLECA understanding that for the Residual Unit Commitment (RUC) process, resources can bid an availability bid quantity (MW) and price (\$/MW), which is separate from their energy bid. Currently, the resources subject to a

⁶ Theaker testimony at page 3, lines 9-11.

⁷ Proposal at 12.

Resource Adequacy obligation must bid zero for the RUC availability bid. This is reasonable as units in the Resource Adequacy Program are already being compensated to be available to the market and should not receive a second payment. The CAISO is proposing for RUC to “keep the “\$0.00/MWh bid for resource adequacy resources until the implementation of the extended day-ahead market (EDAM), at which time resource adequacy will be able to bid at a non-zero price.”⁸ This change would allow resource adequacy resources to receive a double payment for availability. In addition, it could be used as a tool to withhold capacity via a high price while still showing they were available by offering MW to meet resource adequacy must offer obligations.

CAISO offers no justification as to the purpose of changing this requirement upon implementation of EDAM. CLECA presumes this is for participation of units outside the CAISO balancing authority. CELCA notes that many of the utilities operating in other balancing authorities are vertically integrated so their ratepayers are already paying for resources to be available, and the EDAM is likely to be a voluntary market.

CAISO should provide a clear explanation of why this change is needed and why it would not result in double payment or be utilized as a tool for withholding capacity by resource adequacy resources.

d. CLECA Supports the Demand Response Bidding Options

CLECA supports the option for Demand Response programs to have an hourly bidding option and the requirement that the hourly bid be economic during all four 15-minute intervals to get a schedule award. This will help prevent demand response programs from being called when it is not economic to call them for the entire hour.

Please provide your organization’s position on the fifteen-minute scheduling granularity features topic as described in section 2 of the proposal. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

⁸ Proposal at 14. From reviewing the Business Practice Manual the RUC bid is in \$/MW not \$/mWh.

Optional: Include additional subtopics or specific questions on this topic as needed

15-Minute Granularly: Support (with caveats) the continued study with documentation of the benefits and costs are needed, since it will not include unit commitment but just schedule awards. Support with caveats: only if a schedule for needed testing of market operations and settlements is established prior to implementation.

Sub-hourly (four 15-minute) bid curves: Oppose as it is not justified by intra-hour cost changes and opens opportunities for gaming.

Residual Unit Commitment: Oppose; CAISO needs to provide more justification for the non-zero bid for RA resources.

Demand Response: Support hourly option and schedule award dependent on being economic in all for internals. Support of 15 min bidding option.

2. Fifteen-Minute Granularity Impacts to the Energy Imbalance Market

Please provide your organization's feedback on the Fifteen-Minute Granularity Impacts to the Energy Imbalance Market topic as described in section 3 of the proposal. Please explain your rationale and include examples if applicable.

Please provide your organization's position on the Fifteen-Minute Granularity Impacts to the Energy Imbalance Market topic as described in section 3 of the proposal. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

Optional: Include additional subtopics or specific questions on this topic as needed

CELCA does not have any comments at this time on this issue.

3. Energy Imbalance Market Governing Body Role

Please provide your organization's feedback on the EIM Governing Body Role as described in section 4 of the proposal. Please explain your rationale and include examples if applicable.

CELCA does not have any comments at this time on this issue.

Please provide your organization's position on the EIM Governing Body Role as described in section 4 of the proposal. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

Because this only affects day-ahead market participants the primary decision body should be the CAISO governing board. CELCA does not have any specific comments at this time.

Additional comments

Please offer any other feedback your organization would like to provide on the Day-Ahead Market Enhancements Phase 1 initiative third revised straw proposal.

CELCA does not have any additional comments at this time.