California ISO

Stakeholder Comments Template
Day-Ahead Market Enhancements Initiative

This template has been created for submission of comments on proposed market design options discussed with stakeholders during the August 13, 2019 Day-Ahead Market Enhancements working group meeting. Information related to this initiative is available 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 August 27, 2019.

Submitted by	Organization	Date Submitted
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Please provide comments on the preferred market structures that were discussed during the August 13, 2019 working group meeting. Include the pros and cons for each option.

1. At this time, does your organization support moving forward with **Option 1: Financial**, **Option 2: Financial + Forecast**, or **undecided**. Provide supportive comments (in favor of, or in opposition to) below.

Please double click on check box below to select your position:

Option 1:	**Option 2:**
☐ Support ☐ Support with caveats ☐ Oppose ☒ Undecided	☐ Support ☐ Support with caveats ☐ Oppose ☒ Undecided

Option 1: Financial

- Co-optimizes bid-in demand, ancillary services and imbalance reserves
- Imbalance reserves cover historical uncertainty between IFM cleared net load and FMM net load
- Exceptional dispatch if IFM clears inconsistent with operational needs

Please provide comments to explain your position on option #1:

SDG&E does not support but does not oppose option 1 as it's currently designed. In its current proposed market structure, it does not ensure deliverability and it's based on historical virtual bids that have an unknown future correlation in the rapidly changing market. Also, a totally different solution from option 1 or 2 may be superior.

Pros of option #1:

- Uses the same LMP for physical and virtual supply; which follows cost causation principles
- Co-optimizes bid-in demand, ancillary services and imbalance reserves without the added complexity of reliability capacity.

Cons of option #1:

- Does not ensure deliverability, and there is no guarantee that energy and imbalance reserves will meet the physical need in RT
- Dependent on historical virtual bids to determine current ramping needs. The relationship of virtual bids to future ramping needs is not direct and is a tenuous correlation to base ramping needs on.

Option 2: Financial + Forecast

- Co-optimizes bid-in demand, ISO reliability capacity, ancillary services and imbalance reserves
- Imbalance reserves cover historical uncertainty between ISO's day-ahead net load forecast and FMM net load
- Reliability capacity covers differences between ISO net load and cleared net load
- Exceptional dispatch if IFM/RUC clears inconsistent with operational needs

Please provide comments to explain your position on option #2:

SDG&E does not support but does not oppose option 2 as it's currently designed because it is a complex change that has not been explained in sufficient detail to ensure substantial unintended consequences will not occur. Also, a totally different solution from option 1 or 2 may be preferable.

Pros of option #2:

- Difference between IFM cleared net load and CAISO net load forecast is transmission feasible. This option ensures deliverability.
- CAISO net load forecast is used to clear the market, and therefore scaling the imbalance reserve requirement to the forecast is more straight forward. There is also the possibility that forecasting will improve over time leading to more accurate ramping needs determination.

Cons of option #2:

- Virtual supply and physical supply settle at different prices which may have unintended consequences such as the potential for gaming opportunities.
- Reliability capacity is a complex feature that reduces transparency of how awards are selected.

Please offer any other feedback your organization would like to provide on presentation materials and discussion for August 13, 2019 Day-Ahead Market Enhancements stakeholder working group meeting.

Comments:

- DAME proposes to introduce a real-time must offer obligation for awarded imbalance reserves. SDG&E needs CAISO to provide additional details on how imbalance reserves will replace the need for a resource adequacy real-time market must offer obligation.
- In DAME, RA resources will not be required to provide imbalance reserve bids at $0 (as is done today for RUC). Imbalance reserves will cover the incremental cost of making capacity available to cover the ramping need between the day-ahead and real-time market that is currently embedded in RA contracts. SDG&E is concerned that the proposed imbalance reserve mechanism may create a double payment to generators and double costs for LSEs that have existing long-term RA contracts that already cover these costs. SDG&E believes that CAISO should provide further details that explain and justify the need for the additional payment . Specially since that payment is currently not in the RUC process..
- Settlement level of details of both options is need by SDG&E to decide which option (if either) to support.

SDG&E has significant concerns that neither option 1 or 2 will prove acceptable because the hourly nature of the DA market and the 15-minute nature of the RT market are fundamentally mis-aligned which could cause unacceptable problems. SDG&E believes that the CAISO should consider other solutions to address the ramping problems.

On June 15, 2018 the ISO closed the extended short-term unit commitment (STUC) initiative at the draft final stage to pursue an alternative solution in DAME. In SDG&E's opinion the proposed extension of the STUC horizon from 4.5 hours to 18 hours was only a partial solution to the CAISO ramping problems. However, if the CAISO added a new uncertainty element to the extended STUC that increases with the time to delivery, it may prove superior to both option 1 or 2. SDG&E recommends that the CAISO consider solutions other than DAME option 1 or 2 such as an extended STUC with an added uncertainty component.

Follow-up Questions

- Can option 1 be modified to ensure deliverablity and fix one of its major problems?
- Can reliability capacity be replaced with a simpler DA ramping product?
- How is the CAISO planning to address the granularity differences between DA and RT to prevent possible gaming opportunities.
- Should DAME wait until 15-minute DA granularity is possible?
- Can modifications to just the RT market solve most of the CAISO ramping problems?