



Stakeholder Comments Template

Day-Ahead Market Enhancements Phase 2 Initiative

This template has been created for submission of stakeholder comments on the issue paper and straw proposal that was published on February 28, 2019. The paper/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
Victor Kruger (858) 654-1619	SDG&E	April 4, 2019

Please provide your organization's comments on the following issues and questions.

1. Proposed Day-Ahead Market Structure

Please provide your organization's feedback on the proposed day-ahead market structure topic as described in section 3 of the proposal. Please explain your rationale and include examples if applicable.

This is the very early stage for DAME phase 2 with only limited time so far for the CAISO to explain its vision and without a round of clarifying questions for stakeholders. SDG&E's comments are based only on the 1st paper and meeting and could change as the CAISO's proposal is developed.

SDG&E thinks using historical observations of integrated forward market net load error to identify how much day-ahead flexible ramping product (DA FRP) is needed for the following day is not appropriate. Historical net load error is based on factors that could change considerably in the future and result in a poor prediction of the actual DA FRP that is needed and result in increased reliability risks, exceptional dispatch (ED) and increased costs. The DA FRP should be based on current system conditions and

metrics directly coupled with factors that determine the DA FRP need, not factors that are historically correlated but not directly coupled.

Supply has been rapidly changing and demand changes are coming soon. DA FRP must be predictive and not reactive based on historical values. The CAISO's proposed design will have DA FRP reacting slowly to changes and not take into account known upcoming events. SDG&E opposes this historical method. DA FRP must be responsive and utilize all available data.

The elimination of the residual unit commitment process (RUC) with the proposed reliability and deliverability assessment (RDA) may be appropriate. However, the statement "The CAISO may also utilize the reliability and deliverability assessment to evaluate different scenarios, such as modeling CAISO net load plus 10%, derating import capability, or losing a large generator" concerns SDG&E and details on exactly what this means must be fully explained. RDA scenarios must not be allowed to inflate ED above reasonable reliability levels.

SDG&E supports the CAISO's proposal to enforce sub-regional constraints for DA FRP to assure deliverability.

Please provide your organization's position on the proposed day-ahead market structure topic as described in section 3 of the proposal. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

SDG&E supports/Opposes with caveats the proposed day-ahead market structure.

2. Day-Ahead Flexible Ramping Product

Please provide your organization's feedback on the Day-Ahead Flexible Ramping Product as described in section 4 of the proposal. Please explain your rationale and include examples if applicable.

SDG&E supports a must offer obligation in real-time (RT) for DA FRP.

See question 1 for SDG&E's opposition to the CAISO's use of historical observations of integrated forward market net load error to identify how much DA FRP is needed.

Further information is needed on how DA FRP will be split between fifteen-minute and five-minute dispatchable resources. Will minimum amounts of each be set or premium given to one in the optimization? SDG&E agree that the CAISO should procure a portion of the RT FRP requirement in the day-ahead timeframe if supported with further analysis. Buying some RT need DA should lower costs from more competition, but there is an upper limit to the amount when the DA savings are offset by locking in something that turns out not to be needed in RT. More analysis is needed to select the proper amount.

SDG&E thinks a demand curve could be needed for DA FRP depending on how much RT FRP is included. As the price of DA FRP increases, the amount of RT FRP included should decrease.

SDG&E leans towards using a tiered penalty price based on the DA FRP deficient amount. Drastic price changes are not justified for small deficiencies, but true scarcity pricing signals are appropriate.

SDG&E agrees that sub-regional deliverability must be taken into account in DA FRP to address potential cases when awarded capacity is located behind a constraint, so reliability is not compromised, additional backstop is not needed and full value of DA FRP is obtained. Caution must be used to only evaluate true constraints because artificial constraints will limit competition and raise DA FRP particularly without the use of a demand curve. The possible exercise of market power will have to be evaluated and prevented if found.

The CAISO is considering using dynamic ramp rates in the market optimization for all energy schedules and ancillary services and to leverage the existing shared ramping model, which considers awards for both energy and ancillary services. Analysis is needed to assure no unintended consequences result and answers are timely and stable.

The use of interties for DA FRP will be dependent on the results of the RA enhancements initiative. SDG&E expects the clarification of resources and shown transmission will help simplify the use of interties for DA FRP. However, SDG&E does not support only RA resources providing DA FRP. This would overly restrict participation, raise costs and perhaps lead to shortages. Non-RA intertie resources may have to have similar requirements to participate in DA FRP that intertie RA resources will have.

The interaction of corrective capacity with bidding for DA FRP needs further explanation. Also requiring RA resources to initially bid \$0.00/MWh causes SDG&E concern as does calculating a default capacity bid in competitive and non-competitive areas.

Disqualification and penalty framework for DA FRP needs further expansion by the CAISO. SDG&E supports a robust framework to avoid possible gaming.

SDG&E agrees with allocating a portion of FRP costs to net virtual bids and create a separate FRP cost allocation category.

Please provide your organization's position on the Day-Ahead Flexible Ramping Product as described in section 4 of the proposal. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

SDG&E Supports/Opposes with caveats the proposed DA FRP.

3. Re-Optimization of Ancillary Services

Please provide your organization's feedback on the re-optimization of ancillary services as described in section 5 of the proposal. Please explain your rationale and include examples if applicable.

More details and examples are needed on the interactions of all the market products proposed to be changed for DA FRP. SDG&E agrees with maintain and extending system operators ability to block awards to assure deliverability.

Please provide your organization's position on the re-optimization of ancillary services as described in section 5 of the proposal. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

SDG&E supports with caveats.

4. Energy Imbalance Market Governing Body Classification

Please provide your organization's feedback on the EIM Governing Body classification as described in section 6 of the proposal. Please explain your rationale and include examples if applicable.

Please provide your organization's position on the EIM Governing Body classification as described in section 6 of the proposal. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

SDG&E supports the CAISO's proposed classification.

APPENDIX C: DRAFT TECHNICAL DESCRIPTION

5. Assumptions and Mathematical Formulations

Please provide your organization's feedback on the assumptions and mathematical formulations included in Appendix C. Please explain your rationale and include examples if applicable.

Please provide your organization's position on the assumptions and mathematical formulations included in Appendix C. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

SDG&E has not formed a position yet.

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.

The CAISO should continue to refine the order and timing of DAME phases. SDG&E particularly wants to make sure EDAM is not delayed by any DAME issue not needed for EDAM. Any such issues should be pushed back and resolved beyond EDAM.