



Stakeholder Comments Template

Day-Ahead Market Enhancements

This template has been created for submission of comments on proposed market design options discussed with stakeholders during the June 20, 2019 Day-Ahead Market Enhancements workshop. 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 July 11, 2019.

Submitted by	Organization	Date Submitted
<i>Nate Moore</i>	<i>Puget Sound Energy</i>	<i>July 11, 2019</i>

Please provide comments on the proposed formulation options described below. In your comments, please explain your rationale and include examples if applicable. Also, recommend any analysis and data that your organization believes would be helpful to review on these option. Include details and explain your reasoning for the type of analysis and data that you suggest.

- At this time, does your organization support moving forward with **Option 1: Sequential Integrated Forward Market followed by an after-market Reliability and Deliverability Assessment (Sequential IFM-RDA)**, **Option 2: Integrated IFM and Residual Unit Commitment (Integrated IFM-RUC)**, or **undecided**. Provide supportive comments (in favor of, or in opposition to) below.

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

<p><u>Option 1:</u></p> <p><input type="checkbox"/> Support</p> <p><input type="checkbox"/> Support with caveats</p> <p><input checked="" type="checkbox"/> Oppose</p> <p><input type="checkbox"/> Uncdecided</p>	<p><u>Option 2:</u></p> <p><input type="checkbox"/> Support</p> <p><input checked="" type="checkbox"/> Support with caveats</p> <p><input type="checkbox"/> Oppose</p> <p><input type="checkbox"/> Uncdecided</p>
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Option 1: Sequential IFM-RDA

Please provide comments to explain your position on Option 1:

Based on the discussion at the CAISO's technical workshop on June 20, PSE does not support Option 1 at this time. Slide 12 of the presentation used in the technical workshop explains that Option 1 is comprised of the "Integrated Forward Market (IFM) followed by an after-market Reliability and Deliverability Assessment (RDA)." This approach appears similar to the process CAISO utilizes today, with the notable exception that the Residual Unit Commitment (RUC) process will be eliminated and replaced with the RDA.

PSE opposes this approach from a policy perspective. The RUC is effectively a reliability commitment process that utilizes economic signals from market participants to indicate their willingness to meet forecasted system needs. The RDA, on the other hand, appears to divorce reliability from economics because it appears to be comprised solely of system engineering feasibility studies, which will likely result in inefficient solutions. PSE believes that any market construct to address the issues identified in this initiative in the day-ahead timeframe should have an economic component to ensure the most efficient outcomes possible without compromising system reliability.

Option 2: Integrated IFM-RUC

Please provide comments to explain your position on Option 2:

PSE supports Option 2 with caveats based on the discussion at CAISO's technical workshop on June 20. As noted in Slide 12 of the presentation used in the technical workshop, CAISO proposes to integrate the IFM and RUC in this market formulation. From a conceptual perspective, this design appears to more appropriately address the operational needs identified by the CAISO by utilizing the economic signal embodied in the RUC, which should result in more efficient solutions. The discussion at the technical workshop, however, illustrated that there are many details that still need to be addressed, such as:

- Whether the flex ramp product and the new reliability capacity product should be bid separately
 - In principle, these market products may offer different attributes that are not the same, which likely means that they have different opportunity costs. CAISO's proposal to utilize a single offer price for these products may compromise the efficiency of market solutions.
- Settlement implications
 - CAISO proposes to settle the Day-Ahead Flexible Ramp Product (DA FRP) product only in the Day-Ahead Market (DAM). In previous iterations of this proposal, PSE and other stakeholders raised concerns with this approach because it would allow a resource to receive payments twice for the same capacity it provides for the DA FRP and Real-Time Flexible Ramp Product.

The CAISO should explain in detail how this approach is workable, and why the DA FRP settlement should be different from all other products in the CAISO market today.

- The role of virtuals in determining the DA FRP requirement
 - Virtuals appear to be a critical financial instrument in the proposed market design, and the role of virtuals in this approach should be further explored.
- Equal treatment of all resources
 - During the workshop, there was a suggestion that a resource's historical capacity factor should be used to limit the capability of that resource to provide DA FRP. PSE does not believe that this is a resource agnostic design principle.
- Calculation of the DA FRP requirement
 - CAISO and stakeholders should continue to discuss whether the DA FRP requirement under Option 2 should be driven by CAISO forecast error or market participant error.
- Approach to ensuring deliverability

PSE looks forward to further discussion of these and other issues as this initiative moves forward.

2. Please identify any specific data analysis that your organization recommends. Indicate the data request(s), the purpose of the request(s), and how the request(s) will advise the determination of the day-ahead market formulation, or will assist with determining the procurement target for the new day-ahead product.

Comments:

PSE believes that CAISO should provide the following data to help stakeholders better understand the need for the modifications to the DAM that are being proposed in this initiative:

- The frequency, duration, and magnitude of out of market actions taken by operators after the day-ahead market closes due to the anticipation of insufficient upward and downward real-time ramping capability (at least one year of historical data analysis)

CAISO should also provide additional information about the relationship between virtual supply and demand and the proposed DA FRP.

3. Please offer any other feedback your organization would like to provide on presentation materials and discussion for the June 20, 2019 Day-Ahead Market Enhancements stakeholder workshop.

Comments:

PSE appreciates the robust discussion of this topic to date, and notes that further discussion of the material included in the materials for the June 20 workshop would be helpful. As such, PSE requests that CAISO schedule a second workshop to further discuss the information in this material prior to publishing the Straw Proposal in this initiative.