

Stakeholder Comments Template

Price Performance Analysis

This template has been created for submission of stakeholder comments on the Price Performance Analysis white paper that was published on April 3, 2019. The paper, Stakeholder meeting presentation, and other information related to this initiative may be found on the Miscellaneous Stakeholder Meetings webpage at: http://www.caiso.com/informed/Pages/MeetingsEvents/MiscellaneousStakeholderMeetings/Default.aspx.

Upon completion of this template, please submit it to <u>initiativecomments@caiso.com</u>. Submissions are requested by close of business April 18.

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

1. Scope

The Price Performance Analysis effort is intended to ensure ISO markets produce prices that incentivize performance and reflect system conditions. Please provide your organization's feedback on the scope of this effort. Specifically, what should be included, and what should be excluded. Please explain your rationale and include examples, if applicable.

WPTF supports the scope of the effort as described in the Price Performance Analysis white paper and discussed with stakeholders on the April 10 stakeholder call. As evident by the discussion thus far, there are a multitude of factors that are all at play in one way or another in determining the ultimate market clearing price generated by the CAISO markets. WPTF believes the proposed scope is extremely comprehensive and does not appear to shy away from or limit the factors under consideration for this analysis up front. WPTF is encouraged to hear, and supports the approach, that this analysis will be organic in nature; allowing the data to dictate where the analysis ultimately goes will not artificially limit or restrict the result.

As the CAISO and stakeholders continue to engage in this effort, it will be important to keep in mind the difference between price performance and price formation. Improving

both price performance and price formation is crucial. WPTF is encouraged by the CAISO's statement that this effort is intended to ensure the markets produce prices that not only incent performance but also reflect system conditions (i.e. price formation); this is different than determining the market from a mathematical perspective, given the out-of-market actions and operator adjustments, is generating the right price. WPTF believes conducting some market re-runs to assess the "what would have been" will be extremely informative. The market re-runs will provide the CAISO and stakeholders insights into the impact certain factors have on price formation. Load biasing and exceptional dispatches are a few drivers that WPTF believes would be useful, among others, to assess via market re-runs.

2. Drivers

The Price Performance Analysis initiative white paper examined the potential drivers to be included within the analysis. Please provide additional drivers to consider, if any. Please explain your rationale and include examples, if applicable.

WPTF agrees with CAISO on the list of potential drivers discussed in the white paper. Several of these drivers have been brought up as having an impact on pricing in other policy initiatives, such as the impact of virtual bids within the day-ahead market enhancements initiative. As those policy processes continue to move forward, it's important that the information gained through this effort can help shape the market designs in those policy processes.

WPTF believes it would also be useful to evaluate the potential impact of various transmission differences between the day-ahead and real-time markets. This would include comparing transmission limit differences (absent outages), nomogram enforcement, and day-ahead loop flow versus what materializes in real-time.

3. Data Requests

Please provide your organization's feedback on any specific data requests. Please explain your rationale and include examples, if applicable.

WPTF encourages the CAISO to go where the data takes them as in the end this will likely provide more valuable insights.

Additional comments

Please offer any other feedback your organization would like to provide on the Price Performance Analysis white paper.

WPTF appreciates the CAISO prioritizing this analysis especially given the major market reform policy processes currently underway and those on the horizon. As the CAISO looks towards expanding the day-ahead market and bringing on additional EIM entities, it's imperative that prices reflect actual market conditions and provide the right market signal to accurately incentivize participation. Thus, WPTF supports the ambitious proposed schedule for this analysis such that the information generated via this effort can help inform the ongoing policy processes. However, at any point throughout the analysis if the CAISO determines more time is needed to conduct a thorough and comprehensive study, WPTF would be supportive of, and encourages the CAISO to take the additional time.

WPTF is looking forward to collaborating with the CAISO throughout this process and any subsequent stakeholder process that arises from this effort. In the end, WPTF is optimistic that the CAISO will consider a fleet of solutions to address any identified issues and that the fleet of solutions may not necessarily only take on the form of actual changes to the market optimization, such as changes to operating procedures/operator adjustments and improving market transparency. Improving market transparency could provide valuable information that may shape how participants interact with the market and improve price convergence. For example, market transparency could be improved with providing VER forecasts at more granular geographical levels such as sub-laps, potential loop flows, and advanced notice when nomograms will be enforced.