Western Power Trading Forum Comments on EIM Offer Rules July 19, 2018 Technical Workshop

Carrie Bentley - Gridwell Consulting for WPTF - Cbentley@gridwell.com

The Western Power Trading Forum

The Western Power Trading Forum (WPTF) is a California nonprofit, public benefit corporation. It is a broad-based membership organization dedicated to enhancing competition in Western electric markets while maintaining the current high level of system reliability. WPTF supports uniform rules and transparency to facilitate transactions among market participants. The membership of WPTF and the WPTF CAISO Committee responsible for providing these comments include CAISO and EIM entities, load serving entities, energy service providers, scheduling coordinators, generators, power marketers, financial institutions, and public utilities that are active participants in the California market, other regions in the West, and across the country.

Summary

WPTF appreciates the opportunity to submit comments on the CAISO's technical workshop held on July 19 and remains supportive of this process being moved into one or more formal initiatives. Our comments below address the following items in detail:

- WPTF asks for further clarity regarding the CAISO's plan for resolving resource sufficiency test
 concerns brought up by multiple current and future EIM entities and asks that the CAISO
 consider all the issues within a single initiative.
- WPTF is supportive of ensuring EIM entities have the ability to fully reflect willingness to sell
 under competitive conditions, and when mitigation is applied, including being able to reflect
 time-based and bilateral opportunity costs. WPTF asks that the CAISO consider modifications to
 the existing opportunity cost criteria and methodology that would facilitate EIM energy limited
 resources' opportunity costs.
- Market power mitigation and default energy bids go hand and hand and thus WPTF believes the CAISO should address concerns regarding both concurrently. Within this process, WPTF supports the CAISO's goal to ensure equitable mitigation treatment of resources as large differences in mitigation can introduce significant market inefficiencies and potential gaming concerns.

Detailed Comments

Resource Sufficiency Test (RST)

It is WPTF's understanding that the CAISO will be addressing most of the concerns regarding RSTs raised by stakeholders within other initiatives and venues rather than a new RST specific initiative. WPTF asks that the CAISO provide, potentially in the stakeholder comments and CAISO response matrix presented at the workshop, the exact initiative or venue (e.g. BPM change process) each concern will be addressed, along with an anticipated schedule of those efforts.

WPTF specifically supports a separate holistic initiative to improve the transparency and workability of EIM resource sufficiency tests. The current paradigm wherein EIM entities have no visibility into the total test requirement in advance and with enough time to position their resources to meet the requirement needs to be addressed. A holistic review seems warranted, especially as EIM expands to new entities and then extends to the day-ahead market.

WPTF agrees that additional discussion is needed regarding what supply should be included in the RST, especially given the fact that EIM entities are failing by minimal amounts. (e.g. 2 MWs). Based on the discussion at the workshop, it sounds like EIM entities have sufficient additional capacity (i.e. ABC) that does not count towards meeting the RST, and is available for dispatch to meet reliability needs. The CAISO could consider allowing either a small percentage of ABC to count towards RST or apply a small threshold to mitigate instances were entities fail the RST by minimal amounts. In either case, when entities fail the RST by minimal amounts, the market foregoes the benefits of full participation of that entity in that period. WPTF supports having discussions around finding a reasonable balance between preventing leaning and decrease in market benefits caused when entities fail the sufficiency tests by very small margins.

EIM Mitigation and Default Energy Bids

WPTF asks the CAISO to discuss their view on how to apply mitigation to resources within a voluntary market. If the CAISO does continue down the path of applying mitigation to EIM resources, WPTF supports the CAISO's goal of having equitable treatment between CAISO internal and external resources.

In terms of process, WPTF supports the CAISO conducting one mitigation initiative rather than one EIM mitigation initiative this year, followed by another mitigation initiative starting in Q1 2019. If the ISO were to move forward with the two separate initiatives, the policy design elements from the first initiative would then have to become a predetermined design element in the second initiative to maintain consistent and equitable mitigation methodologies across all entities and cost components. This could lead to suboptimal market design elements because concerns raised in the second initiative may not have been considered when developing the policy in the first.

Finally, WPTF seeks clarification on if the fourth DEB option would be available to all resource types or solely for certain resources, such as EIM Hydro or energy limited resources, given that the current DEB options are available to all resources regardless of resource type. Additionally, WPTF would envision that if the fourth DEB option were designed such that the DEB allows for reflection of opportunity costs, the resources would not also be allowed to have an opportunity cost adder as developed under Commitment Cost Enhancements Phase 3 (CCE3) due to energy limitations.

Opportunity Costs

WPTF fully supports allowing EIM entities to be able to reflect opportunity costs of energy limited resources within default energy bids, including those with daily limitations. FERC recently approved the CAISO's Commitment Cost Enhancements Phase 3 (CCE3) methodology that determines an opportunity cost adder for energy limited resources to be included in the resources' default energy bids. Thus, additional discussion on if/how the opportunity cost methodology developed under CCE3 could be leveraged to determine opportunity cost adders for EIM energy limited resources would be beneficial, recognizing that some modifications would be necessary.

As discussed in more detail below, the current CCE3 tariff language does not allow for opportunity cost adders due to daily limitations. Based on the discussion at the July 19 workshop, several EIM energy limited resources have daily restrictions that per current tariff requirements would not receive an opportunity cost adder. While originally this functionality would not be needed due to the CAISO's plan to extend STUC, given that this initiative has been delayed, perhaps indefinitely, WPTF believes it is appropriate to address daily limitations within the current CCE3 opportunity cost framework.

The tariff language per CCE3 policy includes an opportunity cost adder in mitigated energy bids for resources with energy limitations, if both the use-limited resource status and opportunity cost adder criteria, as specified below, are met.

30.4.1.1.6.1.1 Use-Limited Resource Criteria

In order for a resource to be considered a Use-Limited Resource, a Scheduling Coordinator must provide sufficient documentation demonstrating that the resource meets all three of the following criteria:

- (1) The resource has one or more limitations affecting its number of starts, its number of run hours, or its Energy output due to (a) design considerations, (b) environmental restrictions, or (c) qualifying contractual limitations;
- (2) The CAISO Market Process used to dispatch the resource cannot recognize the resource's limitation(s); and
- (3) The resource's ability to select hours of operation is not dependent on an energy source outside of the resource's control being available during such hours.

30.4.1.1.6.1.2 Establishing Opportunity Cost Adders

A Scheduling Coordinator for a Use-Limited Resource that elects the Proxy Cost methodology may seek to establish Opportunity Cost adders for any limitation(s) that meet all three (3) of the following criteria:

- (1) Satisfy the requirements of Section 30.4.1.1.6.1.1;
- (2) Apply for period(s) longer than the time horizon considered in the applicable Day-Ahead Market process; and
- (3) Can be reflected in a monthly, annual, and/or rolling twelve (12) month period.

Given the criteria above, EIM energy limited resources that are restricted due to design considerations (such as hydro with storage) would qualify for an opportunity cost adder in its mitigated energy bid so long as the limitation period is more than a 24-hour period (e.g. can produce no more than 1,000MWhs in a month). Thus, the criteria preclude EIM energy limited resources with daily limitations from receiving an opportunity cost adder even if it meets the use-limited resource criteria. That said, WPTF believes it would be only a small tariff change to allow the opportunity costs in the market and the current opportunity cost methodology could likely be applied to daily limitations.

Another issue that WPTF believes needs additional discussion is how bilateral opportunities could be included as valid opportunity costs within a resource's default energy bid. WPTF notes that bilateral opportunities creating these opportunity costs may already have robust market power checks in place – albeit different market power checks than the CAISO market. Thus, WPTF would be supportive of exploring a policy that allows bilateral opportunity costs in default energy bids and suggests they could be tied to relevant liquid bilateral markets, such as Mid-C prices. One potential solution would be to modify the CCE3 model to reflect the economic tradeoff EIM entities face between selling the last MWh of an energy limited resource in the CAISO market or at, for example, Mid-C market price¹.

¹ The could be done by modifying the objective function to reflect revenues based on either selling at CAISO energy market prices or at a relevant liquid bilateral market price.

Any discussion regarding opportunity costs for EIM battery energy storage and pumped hydro resources should be coordinated with CAISO energy storage resource treatment. Today, EIM and non-EIM energy storage resources are exempt from mitigation and have the ability to reflect opportunity costs under existing bidding rules (i.e. bid up to \$1,000/MWh). Thus, the concern of being mitigated to an offer price that does not reflect appropriate opportunity costs from its energy limitation currently does not apply to battery energy storage and pumped hydro resources. However, if the CAISO were to consider changing mitigation rules applied to energy storage, the discussion should include both EIM and non-EIM energy storage resources.

WPTF thanks the CAISO for consideration of our comments.