California ISO

Policy Initiatives Catalog Submission Form

This purpose of this form is to propose potential policy initiatives that require a stakeholder process and typically require tariff changes. Do not use this form to request or propose process improvements or administrative changes. Such requests should be made through your Customer Service Representative or Account Manager.

California ISO Policy Initiatives Catalog Submission Form			
Date: 8/27/2020			
Submitter Information			
Organization	**Contact Name**	**E-mail**	**Phone**
Western Power Trading Forum	Kallie Wells	kwells@gridwell.com	916-306-1743
Please provide a title for the issue.			
Scarcity Pricing			
Please provide a summary description of the issue (i.e. 500 words)			
WPTF is a broad-based membership organization dedicated to enhancing competition in Western electric markets while maintaining a high level of system reliability. Key to a well function market is accurate price formation that ensures appropriate price signals are provided to the broader market through the market clearing prices. An imperative element of efficient price formation is allowing market prices to rise during near scare and scarce conditions; this is especially important given the supply conditions the CAISO is currently facing and anticipated. The CAISO's Price Performance Analysis Report[1] discusses how there are cases during which the 15-minute prices are reflecting scarcity conditions through the Ancillary Service Scarcity Pricing Mechanism, but the 5-minute prices remain unaffected, i.e., remain low or even negative. This is because the CAISO does not co-optimize energy and ancillary services in the 5-minute market, therefore the 5-minute market is unable to reflect A/S scarcity pricing. WPTF also observed similar market outcomes during the August 14th and August 15th heat wave whereby the 15-minute prices were reflecting scarcity during Stage 2 Emergency Conditions but yet the 5-minute prices remained well under $100/MWh even though the CAISO was still short operating reserves. Even during the Stage 3 Emergency conditions, the CAISO prices did not seem to reflect the value of lost load during the involuntary load shed events; most studies			

[1] http://www.caiso.com/Documents/FirstSolarSubmission2-2021DraftPolicyInitiativesCatalog.pdf

have the value of lost load being well above the CAISO real-time prices during the most recent events.[2]

While the current CAISO market design does have some scarcity pricing features, it still lacks a robust scarcity pricing mechanism that allows DA, 15-minute, and 5-minute energy prices to rise under near scarce conditions. WPTF recognizes that the CAISO as committed to exploring a scarcity pricing mechanism, most recently in the FERC Order 831 Draft Final Proposal, but notes it will either be within EDAM Bucket #3 or potentially its own initiative.[3] Given the severity of this issue, WPTF therefore asks that the CAISO include in the next catalog update a separate Scarcity Pricing Initiative rather than addressing it within the Extended Day-Ahead Market (EDAM) efforts, as it is currently listed.

The initiative should focus on designing a robust scarcity pricing mechanism that is consistently implemented in all three markets (IFM, FMM, and RTD) that allows prices to gradually rise above the marginal economic energy offer under near scarce and scarce conditions prior to having to relax the power balance constraint violation.

Please provide any data/information available that would characterize the importance or magnitude of the issue.

The magnitude of this issue was experienced as recently as August 14th and 15th. It is apparent that the CAISO is operating under tight supply conditions today and the market needs to be able to send out the appropriate pricing signals to incent additional supply. As noted above, during the Aug 14 and 15 trade dates, WPTF observed that the 15-minute prices were reflecting scarcity signals via the A/S Scarcity Pricing Mechanism, yet the 5-minute prices remained under $100/MWh. In other words, even when the CAISO market is operating under conditions during which there are operating reserve deficiencies, the 5-mintue market prices are signaling that there seems to be adequate supply to serve load and meet the ancillary service requirements.

The issue will also become more significant if the CAISO continues moving forward with the System Market Power proposal. The proposed mitigation mechanism will have the effect of suppressing prices during times of tight supply conditions simply because the test is prone to false positives and is unable to distinguish between mitigating due to market power or mitigating due to tight supply conditions. Thus, it's imperative that the CAISO implements a robust scarcity pricing mechanism immediately such that the market is able to reflect scarcity signals throughout all the markets (DA, FMM, and RTD) especially in light of not only the recent reliability issues but the pending implementation of system market power mitigation.

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[2] http://www.ercot.com/content/gridinfo/resource/2015/mktanalysis/ERCOT_ValueofLostLoad_LiteratureReviewandMacroeconomic.pdf

[3] See pg 9 http://www.caiso.com/InitiativeDocuments/FinalProposal-FERCOrder831-ImportBidding-MarketParameters.pdf

Thus, WPTF respectfully requests that the CAISO initiate a stakeholder process focused on a robust scarcity pricing mechanism in Q1 of 2020 rather than have it as a sub-topic in EDAM Bucket #3.