

California Community Choice Association

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1. Please provide your feedback on the Sprint Approach employed in the Price Formation Working Group.

The California Community Choice Association (CalCCA) appreciates the opportunity to submit comments on the Price Formation Enhancements Scarcity Pricing Sprints. CalCCA has no comments on the Sprint Approach at this time.

2. Is there any issue/challenge related to Scarcity Pricing that has not been discussed and warrants further Working Group conversation?

Before moving forward with any proposed solution, the California Independent System Operator Corporation (CAISO) must determine (1) whether existing market mechanisms are insufficient to send the right price signals during periods of scarcity to incent resource availability, and (2) whether the options to consider presented at the workshop would achieve the CAISO's desired outcomes such as reliability, incentive alignment, and market efficiency.

The CAISO defines scarcity pricing conditions as those in which there is "no 'marginal cost of production.'" [1] If it is the case that there is no marginal cost of production, it is difficult to see how modifications to scarcity pricing mechanisms would result in increased reliability through additional supply availability rather than simply increasing generator profits. It is also difficult to see how modifications would incentivize bidding at marginal cost or produce efficient market outcomes.

[1] Sprint 1 Slide 9: <https://www.caiso.com/InitiativeDocuments/Presentation-Price-Formation-Enhancements-Jan10-2024.pdf>.

3. Please provide your organizations feedback on the following Problem Statements presented in the Sprint. This feedback can include comments on the issue/challenge identified, framing of the issue, potential solutions or necessary considerations in order to develop solutions.

a. CAISO's market design limits the opportunity for the Scarcity Reserve Demand Curve (SRDC) to activate during tight system conditions. b. CAISO's market design limits the opportunity for energy prices to gradually rise ahead of impending demand shortfall c. The impact on market prices from reliability use-limited resources and non-market actions during emergency events is not holistically captured by price formation d. Energy storage resource bids/DEBs are limited to a bid cap of \$1000/MWh which may not reflect opportunity costs in tight system conditions when the bid cap is raised to \$2000/MWh. e. The ISO market does not have a circuit breaker mechanism in the event scarcity pricing occurs over an extended period of time.

The problem statements presented in the sprints focused on ensuring prices can rise during tight system conditions to reflect scarcity at the right times. CalCCA understands the CAISO's desire to ensure the market sends the right price signals during periods of scarcity to attract supply and encourage generator performance. It is still not clear, however, that the existing market does not already accomplish these objectives by allowing supply to bid its marginal costs. The typical marginal resource, demand response, will bid at or near the bid cap to reflect its value of voluntary load curtailment. Market participants will be able to observe prices rising, signaling the importance of making sure supply is available and responsive to dispatch instructions. Before

proposing modifications to the existing Scarcity Pricing mechanisms, the CAISO should explain why this framework is insufficient for ensuring supply is available during tight system conditions.

The Working Group reviewed several actions the CAISO can take in the event of a shortage, including (1) the dispatch of reliability use-limited resources like the strategic reliability reserves or reliability demand response resources, (2) the use of Emergency Load Reduction Program or other load modifying programs that do not participate in the CAISO market economically, and (3) operator actions like calling Flex Alerts, arming load, or conducting load shedding. The CAISO then posed a price floor and value of lost load as preliminary options to consider given these actions are not fully captured by price formation.

The CAISO should not adopt administratively set prices based upon the value of lost load. Rather, the CAISO should incentivize resource bidding at marginal costs. As the CAISO dispatches resources up the bid stack, prices could rise to a level to reflect the value of lost load. During times of scarcity, the marginal resource will likely be a demand response resource that will *voluntarily* curtail load when prices are high enough. Demand response resources can be expected to bid at their value of lost load, which is typically at or near the bid cap. Therefore, demand response resources are likely to be the last available supply to be dispatched. Once demand response has been fully utilized, whether or not consumers are willing to pay more to avoid involuntary demand curtailment, there is no additional supply to pay for and simply increasing prices would not result in more available supply.

Setting scarcity prices based upon demand's willingness to pay to avoid *involuntary* load curtailments is problematic for the following reasons. *First*, it can compensate supply above the marginal resource's costs at a cost to consumers. Setting scarcity prices this way would degrade the incentives for resources to bid at their costs and create perverse incentives for generators to artificially trigger scarcity pricing. *Second*, it will be extremely difficult to determine a value that adequately reflects consumers' willingness to pay to avoid involuntary load curtailments while protecting consumers from excessively high prices when demand is inelastic and scarce conditions are present. *Third*, once there is no longer a marginal resource, continuing to increase prices will not make additional supply available. *Fourth*, it is not clear that simply increasing the price administratively will result in more supply output than what would have occurred at a lower administrative price or even at the market clearing price. Unless a supplier is taking a loss at a certain price, which the CAISO has measures to protect against, then the CAISO should not assume higher administrative prices will result in increased reliability. It will certainly cost consumers more for an unknown benefit.

Despite their potential impacts on prices, out-of-market actions are necessary at times to support system reliability. Moreover, the CAISO undertakes out-of-market actions when the market fails to solve for the system needs. The CAISO has cost recovery mechanisms in place for out-of-market actions so that resources that are dispatched in this manner will not operate at a loss. Given these considerations, there does not appear to be a need to refine the current structure as it relates to out-of-market actions and their impact on the CAISO market.

CalCCA agrees with the problem statement that limiting energy storage resource bids/Default Energy Bids to a bid cap of \$1000/ megawatt-hour (MWh) may not reflect opportunity costs in tight system conditions when the bid cap is raised to \$2000/MWh. CAISO should update its systems to allow storage to bid up to the cap that is in place at that point in time. Storage should be placed on a level playing field with all other resources that can bid up to \$2000/MWh.

4. Of the problem statements that were discussed in the Scarcity Pricing Sprint, please provide your organizations view on this problem statement (High priority, Medium Priority, Low Priority, Not a priority, I need more information/discussion to decide).

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While not an explicit problem statement identified above, CalCCA's highest priority within this initiative is to maintain the incentive for supply to bid its marginal cost and refrain from creating incentives for supply to bid

above marginal costs or bid in a manner that triggers scarcity pricing.

5. In Sprint session 3, we provided some examples of out of market actions to explore. What are the out of market actions you believe should be explored further in Working Group conversation?

See response to question 3.

6. Please provide any additional comments of feedback on the Price Formation Enhancements Working Group.

CalCCA has no additional comments at this time.