Price Formation Enhancements Initiative Workshop

03 - 03 Aug 2023

Poll results

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32Q1 (1/2)



Should the following be a Guiding Principle: Enable prices to accurately reflect the willingness of market participants to avoid involuntary demand curtailments?



32Q1 (2/2)

0 0 5

If no, how should it be refined/edited, or why?

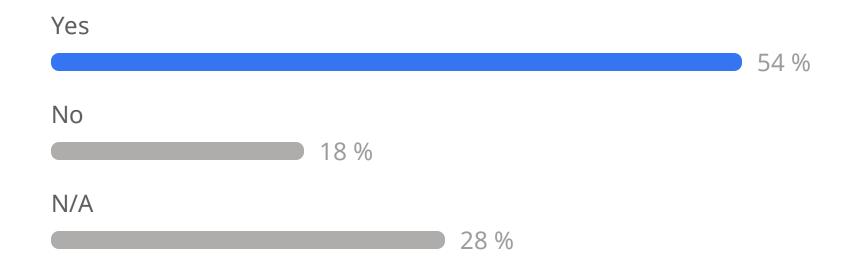
- With limitations given this may result in very extreme values. It is more important to address upstream supply (resource adequacy).
- Prices should continue to be based on marginal cost of generation.
- although need to better define "accurately"
- Framed too generally to be useful
- Should add: "while incorporating/ retaining reasonable caps to protect ratepayers"



32Q2 (1/2)



Should the following be a Guiding Principle Enable prices to indicate that reserves are dwindling and approaching NERC-required minimum levels, and to reflect costs that operators may be incurring to maintain those reserves?



32Q2 (2/2)

0 0 8

If no, how should it be refined/edited, or why? (1/2)

- Why would a generator owner withhold resource except in tight conditions? What kind of generator costs more than 250/MW to make available?
- It is not clear in which market process and for which time interval the price is affected.
- To WPTF's point, need to perhaps better define when we are "approaching" scarcity levels and whether/how operator actions are reflected in prices
- But need appropriate linkage

- to energy scarcity pricing.
- It seems like there are two ideas to unpack here. First, the idea that prices should rise prior to minimum reserve levels. Second, what should the price be/reflect?
- Cost to maintain reserves should be included in those resource's bid prices. LMPs up to the FERC caps already represent when we approach reserves.
- The market should already be doing this. This principle should reflect



32Q2 (2/2)

0 0 8

If no, how should it be refined/edited, or why? (2/2)

why the market isn't properly pricing (i.e., out of market resources).

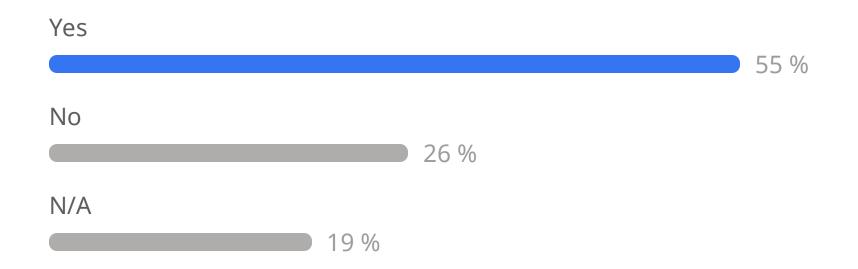
 Shouldn't LMPs already do this, or shouldn't this information be embedded into the bids? If this is referring tangentially to Strategic Reserve resources, that's not clear.



32Q3 (1/2)

0 4 7

Should the following be a Guiding Principle Ensure CAISO's scarcity pricing mechanisms allow market participants to transact in an equitable manner compared to non-market transactions in the broader Western interconnection?



32Q3 (2/2)

0 1 2

If no, how should it be refined/edited, or why? (1/2)

- They can still trade bilaterally. CAISO costs should be base on marginal unit, not other BAA caps.
- Would need to consider how effective EDAM will attract "nonmarket transactions" in general and any EDAM seam issues.
- Prices in bilateral markets in tight conditions are driven by CAISO prices, so allowing CAISO prices to rise significantly above marginal cost will facilitate the exercise of market power across the west.

- Consider re-wording this to focus on attracting western supply, which implies commensurate prices.
- Market prices should be wellfounded and transparent. If they are, they will appropriately influence bi-lateral transactions.
- not sure what is meant by "transact in an equitable manner." also, what are "non-market transactions?"
- Too open-ended. What is equitable?
 Suggest



32Q3 (2/2)

If no, how should it be refined/edited, or why? (2/2)

reframing in terms of comparability of market outcomes.

- This may not be just the CAISO vs. the non-market rest of the West, but also needs to understand how CAISO interacts with EIM/EDAM and how EIM/EDAM interacts with the non-market transactions in the West.
- No, but could change to yes if it were re-written. It's very vague what • Best of the 3. this is trying to get at; I think it

implies the Strategic Reliability Reserve. Would be helpful to define the implied inequity(ies) as well. Needs quite a bit of context to understand.

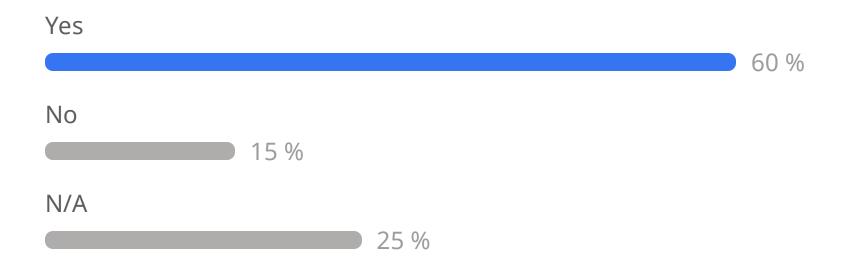
- While recognizing limitations to price transparency and liquidity issues will likely grow as "nonmarket" participant pool shrinks.
- More detail needed



32Q4 (1/2)



Should the following be a Guiding Principle Provide stronger incentives for market participants to perform and deliver in tight system conditions?



32Q4 (2/2)

0 1 2

If no, how should it be refined/edited, or why? (1/2)

- Need to include DR in this "market participant" category
- what kind of incentives?
- Reword, want to incent supply.
 Should not be focused on market participant behavior
- Allowing prices to rise significantly above marginal cost in tight conditions allows the exercise of market power.

- Generator performance incentives in a market with RA paradigm should be through performance penalties out of market
- Should be more general do we need to have additional incentives?
- The guiding principle assumes there is non-performance during tight system conditions, but is there evidence to support this assumption?



32Q4 (2/2)

0 1 2

If no, how should it be refined/edited, or why? (2/2)

Some analysis by the CAISO on this question would be useful for determining if this guiding principle is needed.

- It isn't clear that the incentives aren't currently strong enough.
- Should also include "penalties" for resources that are RA-obligated to be available or otherwise had been awarded a bid to deliver at the IFM.
- Should also include stronger incentives for voluntary supply to offer into CAISO markets

- Not sure what "stronger" mean.
- This is extremely important, James highlighted how today's construct is inadequate in this regard.
- Yes, but: replace "incentives" with "signals" because signals covers both incentives *and* penalties

