| Submitted by | Company | Date Submitted |
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NRG submits the following comments on the March 30 and April 20, 2017 Commitment Cost and Default Energy Bid (CC-DEBE) Working Group Meetings. NRG also intends to provide comments on the template provided on April 26 at a later date.

General comment

NRG appreciates the CAISO's willingness to have an open conversation regarding the nature of its bidding rules and market power mitigation, and, further, to consider structural changes to its bidding rules. NRG also appreciates that EIM entities, while relatively new to the CAISO's markets, are sharing their perspectives regarding the challenges of the CAISO's bidding rules in this process. NRG also appreciates the Department of Market Monitoring's ("DMM's) proposal for near-term changes to gas indices and DMM's willingness to consider longer-term structural changes.

NRG hopes that these promising dynamics will lead to reforms to the CAISO's bidding rules that will provide greater flexibility and protection for those that bear the risk of participation in the CAISO's markets, while more precisely identifying situations in which the exercise of market power is possible and taking appropriate action to prevent that exercise.

CAISO Principles

At the meetings, the CAISO offered the following principles. NRG's comments follow each principle.

• Competitive forces provide market power protection based on profit-maximizing incentives to submit offers for suppliers' expectation of production costs.

NRG strongly agrees with this principle.

• Under competitive conditions, suppliers should be able to offer a price at which they are willing to sell the good based on their asset valuation.

NRG strongly agrees with this principle.

- Under non-competitive conditions:
 - Market must protect consumers against exercise of market power and only mitigate when test shows potential to exercise market power.

NRG agrees with this principle, especially as it is centered on the word "only".

• Under uncompetitive conditions, supply offers should be mitigated to price levels that are a reasonable reflection of suppliers' cost expectations

The reasonableness of this principle centers on the interpretation of the phrase "reasonable reflection of supplier's cost expectations". As NRG notes below, the use of gas indices as a proxy for a supplier's cost of fuel has been problematic. If parties can agree on what constitutes a "reasonable reflection of a supplier's cost expectations" – NRG would support this principle.

• When mitigated, suppliers should not be allowed to recover other factors, even if it contributes to their willingness to sell, due to market power concerns

NRG finds problematic the idea that a supplier may not be able to recover costs they cannot avoid incurring simply because they are mitigated. Mitigated bids should provide for the recovery of all of a supplier's costs.

 When mitigated, reliability externalities might need to be priced in to manage merit order based on needs

Market prices should always reflect reliability needs- but they must also refect the costs a supplier incurs to meet those needs.

NRG Principles

NRG offers the following principles for this process:

- The key factor in assessing the reasonableness of costs in bids is a supplier's *ex ante* expectation of their costs, not an *ex post* determination of their actual costs.
- Market participants should be able to recover their costs under all conditions, not just under most conditions.
- While recovering costs outside of the market is preferable to not recovering costs at all, market prices should reflect a supplier's expectation of costs, including under stressed conditions, to the greatest extent possible. Markets that fail to produce meaningful prices under stressed conditions are failed markets.
- Where the opportunity to exercise market power is not present, the CAISO should not be put into the position of having to project the level of a supplier's costs.
- Where the opportunity to exercise market power is demonstrably present, the resulting mitigated bids should reflect a supplier's expectation of their costs.
- Because units do not operate under all conditions, they neither face risks nor recover costs with temporal symmetry. It is not reasonable, therefore, to believe that costs that are not recovered in the short term will be recovered in the long-term.

- Suppliers should be able to recover OFO penalties that they cannot avoid for example, where the CAISO dispatches units in real-time following the close of the final intra-day gas trading cycle.
- The only mitigation that should be applied to market participants' bids in competitive conditions should be very high "circuit breaker" bid caps.
- Because gas price indices reflect aggregate behavior, and may not be indicative of what a given resource owner's fuel procurement costs are, care should be taken when using them to cap cost recovery.

Direction

NRG supports the following direction for this process.

- In the near-term:
 - Adopting the near-term changes to the gas indices proposed by DMM (updating the next-day DA and same-day RT indices using the most recent ICE information; using a Monday-only price where the Monday-only is sufficiently liquid)
- In the long term:
 - Moving either to a no-load structure, or allowing for hourly changes to commitment costs (subject to lock-in for a unit's minimum run time or optimization horizon)
 - Providing for market participant-submitted reference levels, with *ex ante* verification of structure, fuel cost adjustment and *ex post* verification of actual costs, as needed – something akin to the PJM "Fuel Cost Policy" approach.
 - Dynamic assessment and mitigation of market power associated with commitment costs.

NRG looks forward to the May 23 meeting, and hopes that meeting includes a robust and realistic discussion regarding the costs and time frame for moving to a PJM-like structure that would provide for market participant-submitted, *ex ante* verified, reference levels.