

Stakeholder Comments

Frequency Response Ph 2 2/9/2017 Meeting

Submitted by	Company	Date Submitted
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Southern California Edison (SCE) offers the following comments on the 2/9/2017 Frequency Response Ph 2 Meeting¹ of the California Independent System Operator (CAISO).

The CAISO still has not demonstrated support for its assumption that there is a "continued deterioration" in Frequency Response (FR) as claimed during the meeting

As cited by SCE in its prior comments, the FR shortfall seems to be decreasing, not increasing². SCE had requested the CAISO provide its analysis of the extent to which the CAISO's existing generation fleet has complied with Frequency Response Phase 1 requirements (removal of outer-loop controls and conforming to new droop and deadband requirements). Until such an analysis is provided, the CAISO's assumption of deteriorating Frequency Response is unsupported.

However, should the CAISO demonstrate an actual need, SCE supports meeting such a need with the lowest cost option that is technology agnostic. If the CAISO implements a FR constraint or product in the market, SCE is concerned that using a Transferred Frequency Response (TFR) or other forward procurement option will create an inconsistency between a market determined resource price as opposed to a balancing authority agreement price.

The CAISO has not yet demonstrated whether its fleet, post Phase 1 initiative rectifications, is able to meet the NERC BAL-003-1 requirement that drove the FR phase 1 process and requirement. Yet, during the 2/9/2017 meeting, the CAISO described the goal of the proposed FR product as not being that of serving the NERC balancing requirement but rather meeting a

¹ <http://www.caiso.com/Documents/AgendaandPresentation-FrequencyResponseWorkingGroupMeeting.pdf>

² <http://www.caiso.com/Documents/SCEComments-FrequencyResponsePhase2IssuePaper.pdf>

purported need that the CAISO has not demonstrated or provided any analysis upon³. Thus, the CAISO should:

- a. Determine to what extent the CAISO fleet is able to help the CAISO meet the NERC BAL-003-1 standard need.
- b. Demonstrate the need for a FR product that meets the non-BAL-003-1 need that the CAISO claims.

SCE cannot provide any support for the CAISO's position until these two analyses are performed and the results presented to stakeholders.

FR is an energy service and a balancing service

Any resource that is deployed, even for a single second, produces energy⁴. That energy is not immaterial. If it were, there would not be any need to deploy that energy, whether for FR, Regulation, or any other similar need. Further, a balancing service involves deployment of energy – energy that is the supply that meets the demand for energy. No balancing can be accomplished by holding reserves for capacity alone. Thus, SCE disagrees that FR is not a balancing or an energy service, similar to other ancillary services.

Finally, SCE emphasizes the similarity of voltage support and FR. The former involves a resource dividing output between real and reactive power. The latter involves a resource dividing output between deployed energy or held for capacity. Capacity is the final constraint on both resources regardless of how the output is divided. SCE disagrees with the characterization of different types of capacities.

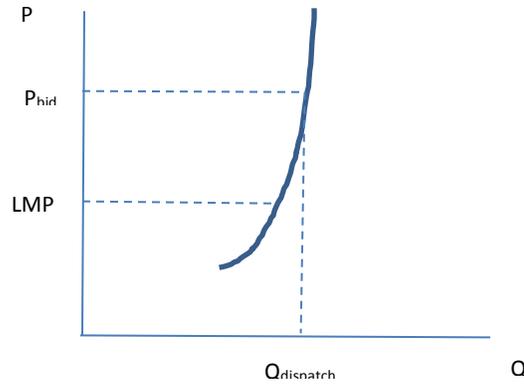
A FR product should be subject to market power mitigation

The CAISO's position is that FR is an interconnection service and does not involve energy transfer. As described earlier in these comments, SCE believes that energy transfer is inherent in FR.

³ Described by the CAISO as an "early withdrawal" of capacity while the CAISO is rebalancing during a frequency disturbance but with no support demonstrating or quantifying such a need. The CAISO then stated that they did not observe any "pressing need" for such a FR product although they did not provide any analysis for or against such a claim.

⁴ To that end, SCE supports compensation for deployed resources, with energy payments, as SCE mentioned in its prior comments.

Regarding market power, consider a FR-dispatched resource with the following bid curve:



SCE asks the CAISO to clarify if such a resource would receive Bid Cost Recovery (BCR) in a circumstance where they deviated due to a frequency response event where the quantity delivered placed the resource on a point of its bid curve that is above the market clearing price. If such a resource will receive BCR, SCE asks that the CAISO clarify how it will mitigate potential market power.