

Stakeholder Comments

Frequency Response Straw Proposal and Stakeholder Meeting, October 12, 2015

Submitted by	Company	Date Submitted
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SDG&E appreciates the opportunity to comment on the Frequency Response Straw Proposal from October 12, 2015 and Stakeholder call on October 19 as well as CAISO's continued development of the CAISO decisions on methods to comply with BAL-003 NERC requirements. SDG&E supports the CAISO's method of outlining a short term response to meet early compliance while leaving a long term solution for continued development and evaluation as the system's responses are better known. SDG&E requests a more robust analysis of possible impacts of short term methods to comply with BAL-003. CAISO and stakeholders should evaluate alternatives to ensure the most reasonable compliance method is selected. Additionally, CAISO has yet to produce data for stakeholders to review for the proposed option of relying on additional spinning reserves to meet possible primary frequency response (PFR) needs. SDG&E requests more information and consideration of other possible alternatives as the CAISO and stakeholders develop a suitable solution to meeting BAL-003.

SDG&E would like CAISO to seriously reconsider the possibility of working with another Balancing Authority (BA) to meet BAL-003 requirements. In the last set of comments, four stakeholders all requested CAISO look to contract additional PFR from another WECC BA. CAISO responded to the comments saying this was 'out of scope.' However, the idea of a Frequency Response Sharing Group (FRSG) comes directly from the NERC Reliability Standards BAL-003-1 document. SDG&E strongly urges CAISO to better explore the idea of working with another BA containing excess PFR to meet collective frequency response requirements. SDG&E believes this may be the most administratively simple as well as cost effective way to meet requirements. Additionally, this will allow the CAISO to evaluate better long term solutions without unnecessarily growing a market product, additional spinning reserves, with unknown consequences.

Frequency Response Drivers

CAISO must have correct information on the ability of a resource to provide frequency response when giving frequency response direction. SDG&E believes CAISO must develop a method to accurately determine where a Multi Stage Generation (MSG) unit is operating at any given time with respect to its PFR. When an MSG resource is at higher generation points of a configuration, it is possible to be running in a temperature control mode. When a resource is running in temperature control mode, it cannot respond to a frequency response event because it may damage the machine to go to a higher output level. Thus, it is imperative CAISO know which resources may be running in temperature control mode or other restrictive configurations that will not be able to provide frequency response. Additionally, if CAISO counts on a unit in a restrictive control mode, the system will probably not meet the response time for PFR and the unit may incur undue penalties from not supplying PFR.

SDG&E imagines much of this information could be captured in the possible 'look ahead' tool which is proposed to determine which resources may be exceptionally dispatched (ED) down to assure adequate PFR. However, it is important that probable real time resource operations are also taken into account for possible interactions with competing CAISO targets like the flexible ramping product and contingency coverage.

Phase 1, addressing real- time deficiencies

SDG&E believes a 'look ahead' tool could be helpful in determining where PFR deficiencies may occur and mitigate issues before they arise. However, any method of implementing a tool of this nature comes with its own challenges. CAISO has outlined a straightforward tool: estimating PFR capabilities after the day-ahead market is run, comparing this to frequency response obligations and curing any deficiencies by procuring additional spinning reserves or, if necessary, issuing EDs. This method stands to be administratively simple to construct and support. However, how much accurate information does this method actually provide for decision making? How does the tool account for details such as the fact not all spinning reserve procured in the DA market will be available for PFR? The Straw Proposal even notes the 'initial calculation is likely to underestimate any deficiency' (pg 14). SDG&E would like more information on the tool and how it will account for these inaccuracies and interactions with real-time operations to address overgeneration and ramping needs.

Phase 1, performance requirements

SDG&E appreciates the imprecise science of allocating system penalties for underperformance for PFR. In this case, penalty allocation may not be as simple as a direct allocation to event underperformers. While there are only 25 instances the CAISO will be measured on for frequency response performance, there are additional frequency response events during the year. It may not be fair to directly allocate penalties to resources which don't respond on a single measured event, especially if they are traditionally reliable resources providing frequency response to the system. In fact, allocation penalties to event underperformers could result in perverse incentives. New generators may choose not to add frequency response capability if there is the possibility for large underperformance penalties. SDG&E looks forward to CAISO's development of this topic.

Phase 2, long term approaches

SDG&E urges the CAISO to focus more on identifying short term options and making an informed decision as opposed to spending time and resources on hypothesizing a long term approach. We really don't have enough information on how the CAISO system will be changing over the next few years to begin to develop a solution for the long run compliance of BAL-003.

Before SDG&E can make informed recommendations on a market constraint versus a market product, we think it prudent to do more analysis on what the system will look like in 2017 and beyond. Perhaps the long term solution is neither a market product nor a market constraint. We cannot know until we have a better sense of what the long term expectations are in the system. We don't know if we will bring any new BA's in as PTOs. The benefits study recently issued and touted by CAISO of PacifiCorp's entry to full participation in the DA market noted the benefits to Frequency Response as one of the benefits of integration. Also storage can effectively supply PFR and we know the 3 IOU's must integrate 1,325MW by 2024 and perhaps much more will become available sooner.

Some compliance experience with BAL-003 may also benefit the development of a long term product. For example, say we choose to lean on spinning reserves only to find it doesn't respond in time and we have issues meeting the frequency response events. We then know it is not a good decision to move forward in this direction. Conversely, the system may find a short term compliance method (spinning reserves, contracting with another BA, etc) to be reliable and cost effective. In this case we have confidence

in what works to move forward with a more long term solution. Information from experience is best when looking to shape the long term solution.