

Western Power Trading Forum Comments on Frequency Response Issue Paper

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The Western Power Trading Forum (WPTF) appreciates the opportunity to provide these brief comments on the Frequency Response Working Group that took place on February 9, 2017. Because the meeting primarily brought-forth participants ideas and did not seem to coalesce around a single solution, our comments focus on high-level principles. WPTF additionally supports the CAISO's plan to hold another Working Group prior to producing a straw proposal.

About the Western Power Trading Forum

WPTF is a California nonprofit, public benefit corporation. It is a broad-based membership organization dedicated to enhancing competition in Western electric markets while maintaining the current high level of system reliability. WPTF supports development of competitive markets throughout the West and of uniform rules to facilitate transactions among market participants. The membership of WPTF includes energy service providers, scheduling coordinators, generators, power marketers, financial institutions, and public utilities, all of which participate actively in the California market and other such markets in the West and across the country.¹

Position statement

Generally, WPTF supports the competitive procurement of frequency response and as equal treatment as possible between procurement of the service from external BAAs and internal generators. In any market design option is important for the CAISO to consider both transferred frequency response, and internal generator capability and provision of frequency response. As WPTF understands it, a main challenge with seeking frequency response both externally and internally is one of timing. Transferred frequency response is an annual product due to BAL-003-1 being an annual standard, while internal frequency response is a real-time product. This disparate timing does not lend itself well to a single frequency response product and therefore WPTF recommends not attempting to do so. Therefore WPTF supports a market design that splits the estimated frequency response requirement into an external and internal requirement, based on expectations of cost and ability of internal capacity to provide adequate frequency response.

Comments

WPTF cannot support an hourly market product until the technical details on how generators may provide or not provide frequency response are better understood.

Much of the discussion at the working group revolved around the idea of an hourly market product for frequency response, similar to the existing ancillary service products. WPTF supports this idea in theory; however, is unclear whether in practice it is feasible. A market for a product is entirely dependent on the idea that a supplier can choose to provide (or not provide) the service at a given price. WPTF therefore asks a simple question: Will all (or at least the majority)

¹A member list can be found [here](#) and these comments do not necessarily represent individual member views.

of generators in the CAISO market feasibly be able to provide or not provide frequency response on an hourly basis based on a market signal?

Until this question is answered in the affirmative, WPTF cannot support a market product for frequency response. It would be both inefficient and arbitrary to pay one generator, but not another despite both providing similar service.

For example, imagine the CAISO needs per 100 MW/0.1Hz and Gen A offers \$8 per MW/0.1Hz and Gen B offers \$8.10 per MW/0.1Hz, but neither Gen A nor Gen B has the ability to turn off their ability to provide frequency response. Gen A would be awarded 100 MW. However, despite this award, Gen B could end up providing 100 MW/0.1Hz (and get paid nothing), while Gen A provides 0 MW and gets paid \$800.

If generators are unable to feasibly (i.e. without onerous effort) provide or not provide frequency response, WPTF would support the consideration of (1) an opportunity cost constraint combined with a provision payment of some sort or (2) a capability payment. WPTF looks forward to discussing both of these ideas at the next Working Group.

WPTF cautions the CAISO into wading into the quagmire that is Resource Adequacy.

During the Working Group the CAISO brought up the potential of excluding Resource Adequacy capacity from not only being paid for frequency response, but being counted on to provide frequency response. The rationale given was that it would be impossible for a generator to provide energy to meet peak requirements and frequency response concurrently and the Resource Adequacy Planning Reserve Margin (PRM) did not consider this fact. Given that each Local Reliability Area (LRA) sets their own PRM and what this PRM covers, excluding Resource Adequacy brings in significant complication and LRA politics. Payments for frequency response are not going to solve the missing money problem² for thermal generators nor will it make storage projects significantly more economic. Therefore the CAISO should strive for a simple design that is feasible, implementable, and avoids lengthy coordination with LRA Resource Adequacy programs.

² https://www.caiso.com/Documents/Presentation-John_Chillemi_NRG.pdf, slide 2.
<http://www.caiso.com/Documents/2015AnnualReportonMarketIssuesandPerformance.pdf>, page 54-56