

**Comments of Powerex Corp. on  
Frequency Response Initiative Phase 2 Working Group**

Submitted by	Company	Date Submitted
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Powerex appreciates the opportunity to comment upon CAISO’s February 9, 2017 Working Group respecting Phase 2 of the Frequency Response Initiative. At the February 9 Working Group, CAISO discussed issues related to a market structure for primary frequency response service in order to ensure long-term compliance with Reliability Standard BAL-003-1, “Frequency Response and Frequency Bias Setting.” Among other things, discussion at the working group focused on whether CAISO should comply with the standard through the forward procurement of primary frequency response, through short-term procurement (e.g., include a primary frequency response product or constraint in the CAISO market optimization), or through some combination of the two.

As noted at the February 9 Working Group, Powerex believes that establishing a forward procurement mechanism is a critical component of ensuring long-term compliance with the BAL-003-1 Standard. Ultimately, achieving compliance with the BAL-003-1 Standard requires that CAISO have access to sufficient primary frequency response capability to respond to frequency response disturbances as they arise in real time. Relying on a short-term procurement mechanism, however, provides no assurance that there actually will be sufficient primary frequency response capability to effectively respond to frequency disturbances when they arise and to achieve compliance with the BAL-003-1 Standard. While a discrete short-term primary frequency response product would allow CAISO to co-optimize the procurement of primary frequency response service with other ancillary services in the day-ahead and real-time markets, it is unlikely that such a short-term product would provide the revenue or certainty needed to incent sufficient investments in primary frequency response capability to ensure reliability.<sup>1</sup> Instead, establishing a short-term primary frequency response product merely allows CAISO to optimize which resources are positioned, with sufficient headroom, to provide primary frequency response each day from the existing resources capable of providing frequency response. Such a short-term only framework provides no assurance that there will actually be sufficient total

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<sup>1</sup> Comments of Powerex Corp. on Frequency Response Phase 2 Issue Paper (Jan. 11, 2017), *available* at <http://www.caiso.com/Documents/PowerexComments-FrequencyResponsePhase2IssuePaper.pdf>.

frequency response capability available to CAISO on a particular day to maintain reliability.

It is important to recognize that any potential failure to achieve compliance with the BAL-003-1 Standard will not only result in the assessment of penalties against CAISO, but has the potential to undermine the reliability of the Western Interconnection as a whole. As the Federal Energy Regulatory Commission recognized when approving the BAL-003-1 Standard, frequency response is an “Interconnection-wide service” and one balancing authority’s failure to perform as required has the potential to endanger “reliability across the Interconnection.”<sup>2</sup> It is therefore critical that CAISO establish a forward primary frequency response procurement framework that ensures, with a very high degree of confidence, that CAISO will consistently meet its BAL-003-1 obligations.

For these reasons, Powerex supports modifying the existing resource adequacy (“RA”) framework to add a one-year forward procurement requirement for primary frequency response. More specifically, Powerex believes that each load-serving entity (“LSE”) should be assigned responsibility for meeting a portion of CAISO’s primary frequency response obligation under BAL-003-1 for a given compliance year. Each LSE would then have the ability to meet this requirement by committing internal generation resources and/or entering into contracts for transferred frequency response from external balancing authorities. Internal resources committed to meet primary frequency response requirements would be subject to a “must-offer” requirement obligating them to offer to provide primary frequency response service each day during the compliance year. In the case of transferred frequency response, an LSE could enter into a contract for transferred frequency response with an external balancing authority (or an authorized seller) under which a portion of an external balancing authority’s primary frequency response performance in response to disturbance events within a compliance year would be counted towards meeting CAISO’s obligations under BAL-003-1.

Powerex believes that incorporating a primary frequency response forward procurement requirement into the RA framework would have a number of benefits:

- Perhaps most importantly, it would result in the advance procurement of frequency response capability (and/or transferred frequency response) sufficient to ensure that CAISO will be able to meet its obligation under BAL-003-1 in each compliance year, thereby promoting reliability in CAISO and across the Western Interconnection.

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<sup>2</sup> *Frequency Response and Frequency Bias Setting Reliability Standard*, 146 FERC ¶ 61,024 at P 96 (2014).

- It would complement implementation of a short-term primary frequency response product in CAISO's market optimization by requiring committed resources to offer their capability into CAISO's day-ahead and real-time markets. In the day-ahead and real-time timeframes, CAISO could then position its system to preserve adequate headroom to meet its primary frequency response requirements (net of any transferred frequency response forward procurements by LSEs) using the most efficient combination of internal generating units, including both resources with forward commitments and those without.
- By compensating resources that agree to provide primary frequency response capability, a forward procurement framework would provide long-term price signals that would incent the development, maintenance, and configuration of resources with primary frequency response capability.
- Finally, allowing LSEs to meet a portion of their obligation through contracts for transferred frequency response would greatly expand the options for CAISO to comply with the BAL-003-1 Standard, thereby ensuring that CAISO's needs are met at least cost to consumers.