

Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Please use this template to provide your comments on the presentation and discussion from the stakeholder web conference held on October 19, 2015.

Submit comments to InitiativeComments@caiso.com

Comments are due November 2, 2015 by 5:00pm

The presentation discussed during the October 19, 2015 stakeholder web conference may be found on the [Frequency Response Initiative](#) webpage.

Please provide your comments on the ISO's straw proposal for each of the eight issues listed below along with the ISO's straw proposal. The ISO welcomes comments in addition to these issues as well.

SolarCity provides these comments on the California Independent System Operator's (CAISO) Frequency Response (PFR) Straw Proposal. SolarCity appreciates the opportunity to submit comments and looks forward to future work with CAISO.

SolarCity encourages CAISO to develop a market mechanism to procure PFR that enables fair competition between all technology types capable of providing PFR, including aggregated DERs with smart inverters¹, which have traditionally not been part of CAISO's resource mix. It would

¹ DER inverters and their controllers can perform many autonomous functions, based on their intrinsic capabilities, various parameter settings, and locally measured conditions, such as voltage levels, frequency, rates of changes in

be appropriate to include the discussion of DER access to a competitive market for PFR in Phase II of the Energy Storage and Distributed Energy Resource (ESDER) initiative.

To comply with NERC BAL – 003 -1 and ensure adequacy of PFR, CAISO has planned to adopt a two phase approach; 1) Improve standards by means of a look-ahead tool, increased spinning reserves and exceptional dispatch & 2) Evaluate if a market product is needed in the long run. SolarCity recommends that CAISO emphasize developing market products sooner rather than later. Out of market measures (such as the look-ahead tool proposed by CAISO in Phase 1) should only be looked at as an interim solution given the uncertainties of meeting BAL-003-1 in a cost effective manner. These measures may indeed lead to sub-optimal market solutions by procuring additional spinning reserve with no regards to PFR capability and costs.

Alternatively, CAISO should procure PFR through a robust market mechanism that minimizes cost and promotes technologies which are more efficient and accurate in meeting BAL-003-1 by considering performance attributes. In order to ensure that capable DERs have mechanisms to offer cost-effective PFR, ESDER Phase II scope should include a dedicated discussion on this topic.

voltage and frequency, temperature, and other information. Regarding frequency response, inverters can reduce or increase power in response to rising or sagging frequency. *Source: CA Smart Inverter Working Group*
http://www.energy.ca.gov/electricity_analysis/rule21/
http://collaborate.nist.gov/twiki-sggrid/bin/view/SmartGrid/IEC61850-7-420_Overview