

FLEXIBLE RESOURCE ADEQUACY CRITERIA AND MUST-OFFER OBLIGATION

DRAFT FINAL PROPOSAL, POSTED FEBRUARY 7, 2014

Submitted by	Company	Date Submitted
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Beacon Power, LLC (“Beacon”) appreciates the work of the CAISO in the Flexible Resource Adequacy Criteria and Must-Offer Obligation (“FRAC-MOO”) initiative to adopt flexible resource adequacy (“RA”) capacity requirements that specifically include energy storage to help address the identified needs for regulation, load following, and ramping services.

Flexible Capacity Value for Regulation Energy Management Resources Should be Based on its Flexible Capability and Not Limited to NQC

Beacon supports the inclusion of Regulation Energy Management (“REM”) resources in the FRAC-MOO proposal. Beacon requests that the CAISO clear up an inconsistency in the proposal, and recommends that the CAISO clarify that the Effective Flexible Capacity (“EFC”) of a REM resource should be based on its flexible capability and should not be arbitrarily limited to the Net Qualifying Capacity (“NQC”), as is suggested in the EFC formulas on page 36 of the proposal and stated on page 38 (“The effective flexible capacity for energy storage resources electing the regulation energy management would be set at the lesser of a resource’s 15 minute energy output capability or the resource’s NQC.”) Setting the EFC for a REM resource at the lesser of a resource’s capability or the resource’s NQC, which is 0 under current RA rules, would always yield 0, and would thus negate the point of the REM resource option. Thus, Beacon requests that the CAISO clarify that the EFC of a REM resource should be simply its flexible capability.

Flexible Capacity Value for Energy Storage Providing Regulation Should be Set at the Bi-Directional Regulation Capacity

Beacon suggests that the flexible capability of energy storage providing Regulation should be set at its up and down / bi-directional regulation capacity.¹ For example, a storage resource with a Regulation capacity of 1 MW would have a Regulation range of 2 MW – 1 MW Regulation Up and 1 MW Regulation Down – and should thus have an EFC of 2 MW. This is comparable to a generator offering 1 MW of Regulation Up and 1 MW Regulation Down would reserve 2 MWs of capacity, and thus those 2 MWs would have an EFC of 2 MWs. Because energy storage can provide flexibility and specifically Regulation in both the charge and discharge direction, the EFC for energy storage providing Regulation should be set at its bi-directional regulation capability.

Regulation Energy Management Resources Should be Included in Flexible Capacity Category 1

As the California Energy Storage Alliance (CESA) stated in its comments on the CAISO Fifth Revised Straw FRAC-MOO proposal,² the CAISO should include the EFC of REM resources in Flexible Capacity Category 1 (“Category 1”). REM resources can provide Regulation continuously, including during the smallest secondary ramp, the largest secondary ramp, and the smallest primary ramp, which are the ramps addressed by Category 1. Because REM resources can operate during the same periods and contribute to system flexibility in similar manners as other Category 1 resources, they should be counted as such.

In summary, Beacon requests that the CAISO clarify that the EFC of a REM resource should be calculated according to its actual contribution to system flexibility, at its bi-directional Regulation capability, and that EFC should not be arbitrarily limited to the NQC. Beacon further recommends that REM resources be included in Category 1, as these resources offer flexibility in all ramps.

Beacon again thanks the CAISO for its efforts to engage stakeholders in this initiative and establish flexible RA rules for energy storage resources.

¹ A REM resource regulation capacity would be based on its 15 minute energy output capability.

² <http://www.caiso.com/Documents/CESAComments-FlexibleResourceAdequacyCriteriaMustOfferObligation-FifthRevisedStrawProposal.pdf>