



January 31, 2014

Via Electronic Mail
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RE: Sierra Club Comments on Flexible Resource Adequacy Criteria and Must-Offer Obligation, Fifth Revised Straw Proposal

Sierra Club submits the following comments on the Fifth Revised Straw Proposal (“Straw Proposal”) for the Flexible Resource Adequacy Criteria and Must-Offer Obligation (“FRACMOO”).

Category 1 (a 17-Hour Obligation to Operate Continuously) Is Not Justified and Should Be Removed From the Proposal

In comments on the December Working Group Meeting, Sierra Club expressed concerns that a proposed 24-hour must offer obligation (“MOO”) was excessive and without technical justification. Although a 24-hour MOO has been removed from the Fifth Revised Straw Proposal, these same concerns extend to a 17-hour MOO that requires continuous operation throughout a 17-hour period.

Development of a MOO should be guided by the reliability concerns vetted and acknowledged in the CPUC Resource Adequacy proceeding. In Resource Adequacy workshops on flexible capacity last year, CAISO presented analysis that purported to demonstrate that, as the sun sets and solar productivity declines, there was an increasing risk that sufficient flexible capacity would not be operationally available to meet ramping needs in shoulder months. According to CAISO, this late evening ramp justified a MOO to ensure flexible resources would be available to meet this highly predictable ramping need. While smaller ramps occur throughout the day, there was no showing that existing market mechanisms – which already operate to meet changes in load – are inadequate to continue to address these significantly more shallow secondary ramps. Therefore, a 17-hour MOO that requires continuous operation does not appear necessary to meet legitimate reliability concerns. To the extent there is a reliability concern with meeting secondary ramps, CAISO has not explained why Category 2, which requires a 17-hour MOO with two potential ramps but without the continuous operation requirement, could not effectively address this need.

Category 1 is of particular concern because it sets a minimum procurement requirement that can only be met with gas-fired generation. Because Category 1 is not needed to address legitimate reliability concerns resulting from increased renewable penetration, the Straw Proposal functions to needlessly cement the role of carbon-polluting resources in California's energy future and undermines achievement of state decarbonization objectives. Indeed, the Straw Proposal turns the Loading Order on its head by requiring that a minimum (and potentially all) of flexibility needs are filled with gas generation without first considering the role of preferred resources in meeting system flexibility needs. Accordingly, Category 1 should be removed from the Straw Proposal.

The MOO for Category 2 Needs Additional Clarification

Category 2 requires a resource to submit economic bids from 5 a.m. through 10 p.m. and allows for participation by use-limited resources that have the ability to start at least twice a day and provide energy for at least six hours. Additional clarification on this obligation is needed. Is the six-hour energy obligation evenly divided into two three-hour periods or would a resource potentially need to provide energy for 5 hours in one period and one hour the next? In addition, is there a minimum period between potential start times? Given that identified flexibility need is for one primary and one secondary three-hour ramp, one would expect the energy obligation would be for two three-hour periods with some degree of temporal separation. Additional clarification is needed prior to the next Straw Proposal to provide stakeholders with a better understanding of the ability of a use-limited resource to qualify for this category.

The Straw Proposal Should Account for the Ability of Energy Storage Charging to Meet Ramping Needs to Recognize the Full Value of this Resource and to Better Align with the Treatment of Energy Storage in the PUC's Current Resource Adequacy Proposal

The Straw Proposal does not appear to account for the charging ability of energy storage to help meet flexibility needs. This significant omission functions to discount the full value of storage as a flexible resource, may result in unneeded overprocurement of other types of resources and non-optimal outcomes, and is inconsistent with the PUC's proposed treatment of energy storage for resource adequacy purposes. The potential use of energy storage charging in meeting flexibility needs should be included in the next iteration of the Straw Proposal.

To the extent CAISO believes charging is accounted for through market dispatch optimization, this mechanism needs further explanation and elaboration in the subsequent Straw Proposal. It would be helpful for the CAISO to describe how storage resources such as pumped hydro and 3-hour battery storage could potentially be bid and dispatched under Category 2 and how its charging functionality is accounted for and credited. If barriers currently exist in the CAISO's market design to using charging as a mechanism to meet flexible capacity needs, these barriers

must be identified and removed. This will facilitate the additional and optimal deployment of energy storage by capturing a potential revenue stream, reduce the overall system cost of meeting flexibility needs and help achieve the clean integration of renewable resources.

Bucket 4 Should Be Limited to Demand Response Resources

Sierra Club has previously expressed concerns that the Straw Proposal’s shift to generic “technology agnostic” resource buckets creates significant risk that these buckets will be filled with carbon-intensive resources. As the PUC has repeatedly found with regard to long term procurement, LSEs “were deficient and spotty in regards to addressing filling their net short position with preferred resources from the EAP loading order and particularly inadequate in accounting for GHG emission reductions.”¹ Moreover, while the Sierra Club believes the Loading Order applies to resource adequacy, others have argued the Loading Order address procurement of new resources only, not resource adequacy contracting. Given these uncertainties, removal of resource-specific MOOs will only function to dilute deployment of low-carbon resources.

With these concerns in mind, Bucket 4, which appears to be modeled after Limited DR products in PJM Capacity Markets,² should be explicitly available only to demand response resources. Specific demand response criteria are not “discriminatory” under FERC. Because the bucket does not require minimum participation and is subject to the same dispatch optimization as other resources, making Bucket 4 DR specific would not unduly discriminate against non-DR resources or raise reliability concerns. Even if it could be viewed as discriminatory, FERC may justify a disparate effect by “pointing to differences ... that are relevant to the achievement of permissible policy goals.” *Black Oak Energy, LLC v. FERC*, 725 F.3d 230, 239 (D.C. Cir. 2013). A separate bucket for demand response is more consistent with California’s climate and energy goals, including the Loading Order, which requires utilities to: “invest first in energy efficiency and demand-side resources, followed by renewable resources, and only then in clean conventional electricity supply.”³ Moreover, because PJM capacity markets already have these types of categories, there is no legitimate basis to conclude a DR specific MOO would not be approved by FERC. Limiting Bucket 4 to DR resources is consistent with California’s clean energy policies and does not unduly impinge on use of other resources to meet flexible capacity needs.

¹ D.07-12-052 at p. 3.

² PJM, PJM Manual 18: PJM Capacity Market (Nov. 2013) at p. 65, <http://www.pjm.com/~media/documents/manuals/ml18.ashx>.

³ Energy Action Plan 2008 Update at p. 1).

Sierra Club appreciates your consideration of these informal comments. If you have any questions, please contact Matt Vespa at matt.vespa@sierraclub.org or at 415-977-5753.

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