



December 27, 2013

Via Electronic Mail

[fcg@caiso.com](mailto:fcg@caiso.com)

**RE: Informal Comments on December 13<sup>th</sup> 2013 CAISO Working Group Meeting:  
Flexible Resource Adequacy Criteria and Must Offer Obligation**

The Sierra Club submits the following informal comment on the December 13<sup>th</sup> Working Group Meeting on Flexible Resource Adequacy Criteria and Must-Ofier Obligation (FRACMOO). The most recent FRACMOO proposal presented at the December 13<sup>th</sup> workshop is a significant departure from the Fourth Revised Proposal. Among other things, the new proposal would create percentage buckets with varying operating characteristics and removes resource-specific must offer obligations that had accounted for the use limitations of different classes of flexible resources.

We appreciate the CAISO's continued efforts to develop a regime that best ensures the operational availability of flexible resources to meet system reliability needs. However, we have several concerns with the new proposed approach. The use of percentage buckets appears to be an attempt at making judgments on resource procurement needs. It may therefore not an appropriate construct for a CAISO market due to PUC authority over procurement. With regard to the buckets themselves, there has been no showing of a legitimate reliability need justifying a 24-hour MOO for the foreseeable future. This bucket should be eliminated.

Sierra Club also disagrees with the shift from offer obligations that recognize the use limitations of specific resources to generic performance driven buckets. This will negatively impact the use of low-carbon resources in providing flexibility and improperly yields to unsupported objections of purported tariff discrimination. It would also be helpful to provide additional clarity on how a 17-hour MOO would affect operations of an energy storage resource. Finally, given the significance of the proposed changes and their dissonance with currently contemplated flexible RA requirements, we emphasize the importance of close coordination the PUC and aligned definitions for both RA and FRACMOO.

**Establishing Percentage Buckets in an ISO Market May Improperly Impinge on PUC  
Authority over Procurement Planning**

The new FRACMOO proposal establishes buckets with different offer obligations. The more expansive the obligation, the higher percentage that bucket can serve to meet flexible capacity needs. Sierra Club is concerned that establishing percentage buckets in an ISO market improperly wades into the realm of resource procurement. For example, conventional gas-fired generation may be the only resource type that can meet the proposed 24-hour offer obligation. By proposing a 50 percent minimum for this resource, CAISO is essentially dictating that at least half (and potentially all) of the system flexibility needs must be provided by a limited set of resource types. A determination of what types of resources are needed to meet reliability needs would seem to be the province of the PUC, not a FERC-jurisdiction market.

Sierra Club is unaware of any ISO market that creates percentage bucket limitations for market participation. To the extent this is current practice elsewhere, it would be helpful if CAISO could explain how a bucket system has been implemented in market systems elsewhere and why its application should apply to California given the PUC's authority over resource procurement.

**CAISO has not provided a technical justification for the new Bucket 1 (24 hour offer obligation)**

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 flexibility resources would be available to meet this highly predictable ramping need. While other upward and downward ramps occur throughout the day, there was no showing that meeting these ramps through existing mechanism created any reliability risk or that these ramps approached the severity of an early evening ramp.

Accordingly, a 24-hour MOO appears excessive and without technical justification. To the extent there is a concern over changes in nightly net load curves due to wind generation, the need for 3-hour ramping to integrate this resource has not been demonstrated. In addition, other mechanisms, such as increased geographic diversity through an EIM may better able to ameliorate any concern. Absent a demonstration that existing mechanisms are unable to address these concerns, Sierra Club recommends that the 24-hour MOO proposed for Bucket 1 be eliminated from the proposal.

For similar reasons, Sierra Club also does not believe a 17-hour MOO is necessary. Sierra Club recognizes 17-hour availability for conventional generation was recognized by the PUC as part of the RA proceeding. At that time, Sierra Club did not object because the PUC was in the process of developing less expansive obligations for use-limited resources that also functioned to meet the predictable 3-hour ramping needs identified by CAISO. Therefore, under the currently

contemplated RA regime, a 17-hour requirement for gas-fired generation would not function to limit participation by preferred resources. However, now that buckets are being proposed with potential minimum and maximum allocations, the 17-hour requirement may function to crowd-out deployment of preferred resources. Prior to any adoption of buckets, percentage minimum and maximums must be justified as necessary to meet reliability needs.

### **Inchoate Assertions of Purported “Discriminatory” Must Offer Obligations Do Not Justify Abandonment of Preferred Resource-Specific Criteria**

The new FRACMOO proposal’s shift to generic resource buckets appears to be an effort to address complaints that criteria intended to address the use limitations of specific resources is improperly “discriminatory.” To date, Sierra Club has seen no explanation or legal analysis suggesting that criteria designed to meet flexible capacity needs while also addressing use limitations of hydro, energy storage, and demand response run afoul of FERC non-discrimination principles. To the contrary, it is Sierra Club’s understanding that east coast capacity markets have developed specific criteria to meet the operational limitations of demand response. It would be helpful for CAISO or other parties asserting purported discrimination to provide a citation to a relevant FERC decision to support assertions that resource-specific definitions violate FERC requirements.

Shifting to generic resource buckets creates significant risk that these buckets will be filled with carbon-intensive resources. LSE’s cannot be relied upon to meet these requirements with preferred resources. As the PUC has repeatedly found with regard to long term procurement, LSE’s “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 [greenhouse gas] GHG emission reductions.”<sup>1</sup> 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.

### **The MOO Should Not Unduly Impede Economic Use of Energy Storage**

Sierra Club is concerned that an extended MOO may needlessly limit use of energy storage resources. It would be helpful for CAISO to explain the lead time associated with dispatch and the actual obligations under an MOO. For example, if an energy storage resource can provide no more than 3-hour ramping capability and is subject to a continuous 17-hour MOO, would this resource need to wait, fully charged, until called upon? The concern is that if the resource is not called on until late evening (which is likely given that ramping needs are most acute during this period), that resource is needlessly idle for the majority of the day when it could be performing

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<sup>1</sup> D.07-12-052 at p. 3.

other grid services. If the resource has day-ahead notice and knew when it would be called upon, this would not be an issue because the resource could plan in advance to be fully charged when dispatched under an MOO. If the resource was subject to a 5-minute response time without advance notice, it would be unable to perform any additional services (including charging during the “duck belly” and thereby mitigating ramp needs) throughout the 17-hour MOO.

**Definitional Inconsistencies Between the CAISO’s FRACMOO Proposal and Flexible Capacity RA Requirements Must Be Resolved**

It is critical that definitions to qualify for flexible RA match the CAISO’s MOO. If not, a resource may be receiving flexible capacity payments but be unable to participate in the flexible capacity market, thereby obviating the basis for the capacity payment in the first instance. The proposed revisions to FRACMOO represent a significant departure from what was last contemplate in the RA proceeding. CAISO should not adopt FRACMOO requirements until these differences are fully reconciled.

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

Matthew Vespa  
Senior Attorney  
Sierra Club

Cc: Karl Meeusen, [kmeeusen@caiso.com](mailto:kmeeusen@caiso.com)