

**Calpine Comments on the Flexible Resource Adequacy Criteria and Must-Offer
Obligation
Fifth Revised Straw Proposal**

Submitted by	Company	Date Submitted
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Calpine appreciates the efforts of CAISO staff to develop a proposal that is readily implementable and assures reliability. Calpine’s comments focus on the definitions of the Flexible Capacity Requirement Categories (“FCCs”) in section 5.4 and the associated must-offer obligations in section 5.5.

First, Calpine requests clarification of the justifications for the FCCs. While the FCCs seem reasonable, Calpine would like to understand better the analytic and reliability justifications for the categories.

Second, Calpine has a specific concern about the definition of the must-offer obligation for category 2 resources. The definition appears to require use-limited resources to be able to start twice per day in order to qualify for category 2. Calpine believes that the definition should be generalized so that use-limited resources that are capable of ramping over their Effective Flexible Capacities, regardless of whether doing so requires starting, qualify for category 2. There may be CCGTs that are use-limited due to limitations on starts that nevertheless are capable of ramping over their EFCs multiple times in a day.

With respect to the definition of FCCs, Calpine would like to understand better how they are supported by the CAISO’s analysis and whether they fully address the CAISO’s reliability requirements. In particular, Calpine would like to understand the following:

With respect to Category 1 and 2 resources, what is the analytic basis for the CAISO’s proposed requirements to procure non-use-limited (Category 1) resources? If flexible capacity requirements are related to the ability to satisfy up to two three hour ramps per day, why are resources with more energy than necessary to meet two three hour ramps needed, i.e., couldn’t sufficient Category 2 resources satisfy all three hour ramps, including both primary and secondary ramps, in a month? If Category 1 resources are needed to address requirements other than three hour ramps, what are those requirements?

With respect to all FCCs, Calpine requests clarification of the durations (in days) of various resource needs. For example, could some portion of Category 2 requirements be satisfied with resources that meet the Category 2 requirements but only for a subset of days within a month? Relatedly, as the CAISO suggested at the last stakeholder meeting, is the limit on Category 4

resources based (loosely) on an analysis of the frequency of the most extreme ramping events?

Again, Calpine thanks CAISO staff for addressing a very complicated set of issues pragmatically and looks forward to the next version of the proposal.