

Stakeholder Comments Template

Subject: Reliability Services

Submitted by	Company	Date Submitted
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Calpine appreciates the opportunity to comment on the draft straw proposal. Calpine's comments reflect the fact that many of the aspects of the proposal are preliminary and the expectation that important details of the proposal will be developed in subsequent drafts.

Generally, the proposal seems sound. Calpine has the greatest concern about the elements of the proposal related to the replacement of CPM. These concerns are elaborated below.

1. Please provide feedback on Part 1: Minimum eligibility criteria and must-offer rules.
 - a. Comments on proposal portion of section
 - i. Eligibility criteria

The CAISO's proposed default qualifying capacity criteria for distributed generation resources and non-generation resources appear reasonable. In addition, Calpine supports the CAISO's proposal to enhance the qualifying capacity criteria for Proxy Demand Resources, but requests a clarification of the proposed criteria. Section 4.4 refers to "availability" requirements of "at least 24 hours per month, at least three consecutive days, and at least four hours per dispatch." Could the CAISO clarify that these are requirements to be able to (1) supply at least 24 hours of energy in a month, (2) be dispatched on 3 consecutive days, and (3) be dispatched for at least four hours per dispatch.

- ii. Must-offer requirements

In describing how DEBs might be formulated for NGRs, the draft straw proposal notes "For a non-generator resource, the incremental fuel cost is based on the price it pays for energy to charge the resource. Therefore, the ISO requests stakeholder input as to how to calculate default energy bids for storage resources and what costs should be included." While the cash cost of charging an NGR may reflect the cost of electricity to charge the resource, once the resource is charged, the economic cost of using the stored energy is its opportunity cost. Consequently, Calpine recommends the formulation of DEBs for NGRs based on opportunity cost recognizing

that the opportunity cost of energy associated with limited duration storage that can be recharged daily or more frequently may be qualitatively different than the opportunity costs associated with use-limited resources such as start-limited conventional generation or some forms of hydro generation.

b. Comments on phase 2 consideration items

Calpine supports the consideration of the issues identified in section 4.5 in a subsequent phase of the initiative, as proposed by the CAISO.

- i. Intertie resources
- ii. Block dispatchable pumping load
- iii. ISO dependence on MCC buckets

To the extent possible, the CAISO's consideration of the MCC buckets should be coordinated with any CPUC analysis of similar issues.

c. Other comments

2. Please provide feedback on Part 2: Availability Incentive Mechanism.

a. Comments on the general direction of the design

The basic design of the incentive appears coherent. Generally, Calpine does not fully understand the motivation for a design based on a single availability measure for each hour rather than distinct availability measures for flexible and generic RA, as in some previous proposals. Leaving current availability incentives in place for generic RA but introducing new additional availability incentives for flexible RA might require fewer changes to current market rules and disrupt existing contracts less.

b. Comments on design features

- i. Bid-based assessment
- ii. Fixed availability percentage band
- iii. Single assessment for flexible and generic overlapping capacity

Could the CAISO explain the claim in section 6.5.3 that "This proposal also reflects the fact that the ISO created the flexible requirement in part due to difficulties with oversupply." Is the CAISO referencing the current oversupply of generic RA capacity relative to the planning reserve margin, the oversupply of self-scheduled resources in CAISO spot markets, or something else? In what sense have concerns about oversupply shaped the CAISO's availability incentive mechanism proposal?

iv. Other features

Calpine requests clarification of the claim in section 6.5.2 that “Practically, the ISO may not be able to freely dispatch Pmin capacity even without a self-schedule due to minimum run-time constraints; however, this was not addressed in the initial development of the EFC and will not be addressed in phase 1 of this initiative.” The claim suggests that resources with different minimum run-time (and perhaps other) operating constraints, that are not considered in the current EFC counting rules, have different value to the CAISO with respect to addressing operational flexibility problems. Throughout their development, Calpine repeatedly expressed concern about the treatment of operating characteristics in the EFC counting rules. In particular, Calpine suggested that resources that require day-ahead starts should not be counted the same as resources that can be started during the operating day. To reflect the value of different operating characteristics that are not currently considered in EFC counting rules, Calpine recommends that the CAISO (and the CPUC) revisit EFC counting rules in this initiative and the CPUC RA proceeding.

c. Comments on price

Calpine believes that potential exposure to availability penalties should not exceed greatly prevailing RA compensation. As suggested in the proposal, if the CAISO chooses to replace current CPM procurement at an administrative price with competitive solicitations and offers in the solicitations are capped, the offer cap might provide a plausible upper bound on prevailing RA compensation and serve as a reasonable basis for the availability incentive mechanism payments. In addition, for simplicity, it might make sense to base availability incentive payments on a relatively static price, such as an offer cap, rather than a price that it tied directly to market conditions and fluctuates more often.

d. Comments on capacity and resource exemptions

e. Other Comments

3. Please provide feedback on Part 3: Replacement and Substitution.

Calpine supports the CAISO’s apparent willingness in this initiative to consider “the type of replacement required for capacity which may meet local or flexible qualifying requirements, but which is shown as generic system capacity.” A consistent concern for Calpine has been the CAISO’s insistence on the replacement of local resources with other local resources, regardless of whether the replaced local resource actually has been sold as local RA capacity. It is unclear how this issue is addressed in the draft straw proposal.

In addition, to the extent possible, Calpine believes that the CAISO should articulate reliability requirements on an ex ante basis and not impose additional reliability requirements after the fact. Consequently, Calpine supports clear rules that limit CAISO discretion with respect to what replacement and substitution will be allowed. For example, a rule that allows a flexible resource to be replaced with another flexible resource of the same or superior flexible RA category regardless of operating characteristics, such as ramp rates, beyond how such operating

characteristics determine a resource's eligibility for a flexible RA category, might provide appropriate ex ante clarity.

- a. Comments on scope
 - b. Comments on replacement and substitution issues
 - i. Complexity
 - ii. CPM designation risk
 - iii. Resource leaning
 - iv. Other issues
 - c. Comments on flexible replacement proposal
 - d. Comments on flexible substitution proposal
 - e. Other comments
4. Please provide feedback on Part 4: Capacity Procurement Mechanism.
- a. Comments on index price

Calpine does not support reliance on index prices to set backstop prices. Calpine agrees with the arguments against index pricing in the proposal, e.g., many RA transactions are for combinations of different months or annual strips. Using transaction prices for combinations of months to formulate index prices for individual months is likely to overstate prices for low price months and understate prices for high price months. In addition, Calpine shares the CAISO's concern that even if accurate RA price indices can be constructed, they may not constitute appropriate bases for backstop compensation because, by definition, backstop procurement involves resources that are not procured as RA capacity and hence presumably are more expensive than resources procured as RA capacity.

- b. Comments on competitive solicitation process

The CAISO's proposed competitive solicitation approach seems like a minimally disruptive means of reflecting market conditions in backstop compensation while preserving many elements of the current process. Under the proposal, very little about the current process would change except for the following: (1) Non-RA resources would have the opportunity to offer bids to supply backstop capacity in the year-ahead and month-ahead time frames; and (2) Resources procured through CPM would be paid their bids rather than an administrative price.

- c. Comments on other changes potentially needed to CPM
- d. Comments on CPM price

e. Comments on supply-side market power mitigation measures

Given that backstop procurement is frequently for reliability problems that only can be addressed by a relatively small number of resources, Calpine recognizes the potential for supply-side market power. To address supply-side market power, Calpine recommends an offer cap that reasonably reflects the net going-forward cost of a relatively expensive proxy unit, such as a steam unit or a combustion turbine, i.e., a reasonable proxy for the cost of the marginal source of *capacity*. The offer cap should reflect all reasonable costs of operating the proxy resource, including appropriately amortized major maintenance costs. Projected energy and AS revenues of the proxy resource should be netted out of going forward costs in calculating the offer cap. To assure cost recovery for resources procured through CPM and discourage reliance on backstop procurement, a margin above the net going forward costs of the proxy resource should be included in the offer cap. As discussed above, this offer cap might also constitute the basis for availability incentive payments.

The offer cap should be set no more often than annually. As with the last CPM settlement, parties might agree on an initial cap and a formula by which to escalate the cap for a period of several years.

Calpine opposes resource- or technology-specific offer caps for at least two reasons: First, the determination of such caps would be complex. Second, such caps are potentially inappropriate for the competitive solicitations proposed by the CAISO. While Calpine understands that resource-specific offer caps are used in some centralized capacity markets, such as RPM, in which offers for existing resources are capped at estimates of net going forward costs, there are many complementary elements of such markets that ensure just and reasonable pricing, e.g., demand curves that prevent inappropriately low prices when supply exceeds planning reserve margins and the ability for resources to earn infra-marginal rents when more expensive resources set clearing prices. Given that the competitive solicitations proposed by the CAISO would not include these complementary features, resource specific offer caps, particularly if the caps are based on net going forward costs, may not yield just and reasonable compensation.¹

f. Comments on demand-side market power mitigation measures

Calpine agrees with the proposal that buyer-side market power is unlikely to be a significant issue in the competitive solicitations proposed by the CAISO. (Calpine believes that there is a broader buyer-side market power issue related to the interaction of CPM, the RA program, and LTPP, i.e., to the extent that new resources are procured on a discriminatory basis through LTPP as well as RPS and other targeted procurement mechanisms, short-term bilateral RA markets and the proposed solicitations for backstop capacity are likely to remain oversupplied, yielding low prices that may not allow for reasonable recovery of capital and other fixed costs for existing resources.)

¹ In 134 FERC ¶ 61,211, with respect to CPM compensation, FERC observed, “The Commission is concerned that CAISO’s proposal to pay going forward costs may create the potential for distorted pricing signals and deny resources a reasonable opportunity to recover fixed costs.”

g. Other comments