California ISO

Stakeholder Comments Template

Resource Adequacy Revised Straw Proposal

This template has been created for submission of stakeholder comments on the *Resource Adequacy Revised Straw Proposal* that was published on July 1, 2019. The proposal, stakeholder meeting presentation, and other information related to this initiative may be found on the initiative webpage at: http://www.caiso.com/informed/Pages/StakeholderProcesses/ResourceAdequacyEnhancements.aspx

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on July 24.

Submitted by	Organization	Date Submitted
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Please provide your organization's comments on the following issues and questions. Please explain your rationale and include examples if applicable.

1. System Resource Adequacy

- Please provide your organization's feedback on the *Determining System RA Requirements* as described in *Section 5.1.1*.

CDWR seeks clarification that if RA capacity showings based on the CEC provided coincident peak demand for an LSE will continue under the RA enhancement. The LSEs that plan RA requirements based on the CEC derived coincident peak are defined as "Reserve Sharing LSEs" meaning that they share the reserve required systemwide.

For an LSE that peaks during CAISO system off-peak hours, capacity showings based on the system coincident peak demand may not meet the off-peak hour energy needs. In such case, for energy needs, an LSE may have to rely on CAISO market purchases or other energy contracts as a solution to the energy

requirements. Will such LSE be deemed compliant under the RA enhancement proposal?

An LSE that shifts load to low energy price hours (e.g., solar hours) may increase load significantly during those hours. In doing so, the LSE helps in mitigating the oversupply conditions when the net load or the energy price is lower. As proposed, it appears that such LSE would have to meet its capacity and energy requirement based on a load that peaked during the lowest net load or lower price hours. This would result in higher cost to the LSE. As a result, the LSE would not be incentivized to increase or shift load during low energy price or low net load hours to mitigate oversupply condition. Forcing capacity requirement based on LSE's highest demand (that might coincide with low net load or low energy price hours) may exacerbate the oversupply condition. Further, the LSE may be forced to shift load to other hours including system coincident peak hour to flatten the load in order to reduce capacity obligation. This would discourage demand response triggered by price signal unless the capacity requirement is based on CAISO system coincident peak demand for an LSE.

- Please provide your organization's feedback on the *Forced Outage Rates and RA Capacity Counting* as described in *Section 5.1.2*.

An integrated hydroelectric system does not operate in the same fashion as other standalone hydro resources. Power operations of such system are subordinate to water operations. Accordingly, standalone hydro resources' forced outage factor that might be appropriate for hydro resources seeking to maximize revenue from the markets may result in erroneous representation of available capacity if applied to an integrated hydro system.

EFORd should not be applied to integrated hydro resources, including hydro resources participating as pumping load, because calculating UCAP with numbers reflecting the year-to-year uncertainty in hydrology may have a profound and inaccurate impact on the effective forced outage rate applied for UCAP calculations.

For such hydro resources, ICAP (NQC) should be equal to UCAP. If EFORd were to be applied to hydro resources for UCAP calculations, annual forced outage rate applied to 24 x7 operation would be preferable.

It is not clear how forced outage rate and UCAP would apply to a participating load. Currently a participating load provides RA by providing non-spin in the day ahead market and load drop-in real-time market for the day ahead non-spin award. Definitions of outage related terms applied to a generating unit may not

mean the same as for a participating load. When a participating load drops load it is equivalent to a generating unit's generation. What constitutes a forced outage for a participating load is undefined. Therefore, a participating load ICAP (NQC) should be equal to UCAP which eliminates the need for forced outage rate calculation.

- Please provide your organization's feedback on the *System RA Showings and Sufficiency Testing* as described in *Section 5.1.3*.

  As proposed, there will be a systemwide portfolio assessment for each hour for required reliability need. If a deficiency occurs and is not cured by the LSEs, ISO may perform backstop procurement for filling the gap and allocate the costs to LSEs on their load share ratio basis. CDWR supports this general structure as consistent with the current requirements. However, it should be made clear that an LSE's UCAP requirements should be based on CEC's provided coincident peak demand for the LSE.

- Please provide your organization's feedback on the *Must Offer Obligation and Bid Insertion Modifications* as described in *Section 5.1.4*.

  The proposed bid insertion for use limited resources would be problematic for CDWR as its resources are hydraulically linked and have various constraints in moving water from the north to the south. FERC has approved "no bid insertion requirement" for use limited hydroelectric resources under the current rules.

- Please provide your organization's feedback on the *Planned Outage Process Enhancements* as described in *Section 5.1.5.*

  No comment currently.

- Please provide your organization's feedback on the *RA Import Provisions* as described as described in *Section 5.1.6*.

  CDWR supports the continuation of the current allocation methodology.

- Please provide your organization's feedback on the *Maximum Import Capability Provisions* as described in *Section 5.1.7.*

CDWR agrees that a requirement to identify the source balancing authority area for imports is sufficient to address the issue raised.

In summary, please provide your organization's position on System Resource Adequacy (Section 5.1). (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

Support with caveats, as discussed above.

2. Flexible Resource Adequacy

- Please provide your organization's feedback on the *Identifying Flexible Capacity Needs and Requirements* as described in *Section 5.2.1*.

  No comment at this time.

- Please provide your organization's feedback on the *Identifying Flexible RA Requirements* as described in *Section 5.2.2*.

  No comment at this time.

- Please provide your organization's feedback on the *Setting Flex RA Requirements* as described in *Section 5.2.3*.

  No comment at this time.

- Please provide your organization's feedback on the *Establishing Flexible RA Counting Rules: Effective Flexible Capacity Values and Eligibility* as described in *Section 5.2.4*.

As the NQC can be updated within a year, EFC should be allowed to be updated whenever NQC is updated.

- Please provide your organization's feedback on the *Flexible RA Allocations, Showings, and Sufficiency Tests* as described in *Section 5.2.5*.

  The Long Ramp portion of flexible RA attributable to an LSE's load ramp should be based on the LSE's average monthly 3-hour load ramp trend for the applicable month. Currently, allocation for the load ramp is based on LSE's historical 3-hour load ramp coincident with system net load ramps over the top 5 events. CDWR is in favor of using monthly average 3-hour load ramp instead of top 5 to avoid an anomalous allocation due to unusual circumstances causing a single day ramp to disproportionately affect the result because it counts as one of the top 5 event days.

- Please provide your organization's feedback on the *Flexible RA Must Offer Obligation Modifications* as described in *Section 5.2.6*.

  To increase the pool of resources to provide flexible RA, must offer obligation (MOO) should be applied to a reasonable period when long ramp and fast ramping need occurs. If MOO hours are unnecessarily expanded, it may result in inefficient utilization of capability for flexible RA.

In summary, please provide your organization's position on Flexible Resource Adequacy (Section 5.2). (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

Support with caveats, as discussed above.

3. Local Resource Adequacy

- Please provide your organization's feedback on the *Local Capacity Assessments with Availability Limited Resources* as described in *Section 5.3.1*.

  Please confirm CDWR's understanding that a participating load (PL) is not an availability limited resource.

- Please provide your organization's feedback on the *Meeting Local Capacity Needs with Slow Demand Response* as described in *Section 5.3.2*.

In summary, please provide your organization's position on Local Resource Adequacy (Section 5.3). (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

Support with caveats, as discussed above.

4. Backstop Capacity Procurement Provisions

- Please provide your organization's feedback on the *Capacity Procurement Mechanism Modifications* as described in *Section 5.4.1*.

  No comments at this time.

- Please provide your organization's feedback on the *Reliability Must-Run Modifications* as described in *Section 5.4.2*.

  No comments at this time.

- Please provide your organization's feedback on the *UCAP Deficiency Tool* as described in *Section 5.4.3*.

  It is not clear how a UCAP value for hydro and participating load would be established.

In summary, please provide your organization's position on Backstop Capacity Procurement Provisions (Section 5.4). (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

Support with caveats, as discussed above.

Additional comments

Please offer any other feedback your organization would like to provide on the Resource Adequacy Revised Straw Proposal.

Contingency flag provision should continue:

Currently some of CDWR resources provide RA using a contingency flag, which allows the ISO to dispatch them in a contingency. This provision allows CDWR to offer reliability services from its resources when they are available, while protecting its primary obligation to use its resources to ensure reliable water delivery whenever necessary. This provision should continue to allow CDWR resources to offer reliability services to serve critical grid reliability needs while maintaining the needed water delivery capability on a daily basis.

24x7 MOO and bid insertion should not apply to an integrated hydro system:

Due to the complex and uncertain nature of pumping demand and generation in the water delivery system, many enhanced design features that are intended to apply universally to typical generating resources may not work for an integrated hydro resources.

Use limited resources should continue to be exempt from ancillary service and RUC must offer:

Use Limited Resources, including hydroelectric resources and participating loads, are exempt from the Ancillary Services and the RUC must offer. This should continue.