Please provide your organization’s overall position on the RA Enhancements fifth revised straw proposal:

- [ ] Support
- [ ] Support w/ caveats
- [ ] Oppose
- [ ] Oppose w/ caveats
- [ ] No position

Please provide your organization’s comments on the following issues and questions.

1. **System Resource Adequacy**

   Please provide your organization’s feedback on the System Resource Adequacy topic as described in section 4.1. Please explain your rationale and include examples if applicable.

   a. Please provide your organization’s feedback on the Determining System RA Requirements topic as described in section 4.1.1. Please explain your rationale and include examples if applicable.

      Calpine looks forward to reviewing the results of the June 2020 RA portfolio sufficiency analysis and any recommendations suggested for adjustments to RA procurement.

      Again, Calpine recommends that the CAISO perform this portfolio analysis within “local areas and sub-areas,” as suggested at page 5 of the draft. The need for this analysis is evidenced by the CAISO’s own LCR studies suggesting charging limitations for shallow (limited duration) storage being interconnected in local areas.
b. Please provide your organization’s feedback on the Unforced Capacity Evaluations topic as described in section 4.1.2. Please explain your rationale and include examples if applicable.

   Calpine requests a stakeholder workshop to discuss the conversion from historic OMS nature-of-work codes to RC-defined outage codes. Given historic practice and interpretations, the new RC codes seem to introduce significant ambiguity.

   Should the CAISO and CPUC move forward with UCAP, Calpine supports the inclusion of UCAP exemptions for “rare” forced outages – particularly, outages in which the duration, magnitude or likelihood of recurrence are not expected to affect future operations.

   Calpine does not support the blanket denial of forced outages due to transmission-induced generation outages and wildfires. Rather, these events, like other forms of unique and significant outages, should be subject to possible exemption.

   Also, Calpine does not support the logic of the proposal where it concludes that PSPS outages are representative of unreliable physical locations. Millions of customers were affected by the broad and non-specific PSPS events of 2019 – not all of which affected areas that might be considered “fire-prone”.

   Finally, the CAISO now proposes to use the lowest 20 percent “cushion hours” as the basis for availability. The CAISO presented analysis of the lowest 20 percent in each peak and off-peak month. Calpine would prefer a metric that targets the lowest supply cushion hours whenever they occur – not allocated each to peak and off-peak months. That is, if tight conditions are dominant and extended in peak months, they should not be artificially limited to allow for off-peak availability hours. This concern is even greater if the CAISO adopts a higher planning reserve margin for off-peak, shoulder months since the supply cushion would be specifically and consciously raised in those months.

   Additionally, Calpine believes that the CAISO has moved too far to “average availability” by including the top 20 percent of supply cushion hours. In fact, the data show that the CAISO would be evaluating availability when there is a substantial (8 or 9,000 MW) supply cushion. Based on the data provided, Calpine could support a metric that evaluates the supply cushion and availability for the lowest 10 percent of all hours in a year, regardless of in which month they occur.
i. Please provide your organization’s feedback on whether the ISO should establish a dead band around a resource’s UCAP value given the associated benefits and burdens, as described in section 4.1.2. Please explain your rationale and include examples if applicable.

   Calpine does not see the need for a dead band when resource-specific data is used.

ii. Please provide your organization’s feedback on Option 1 and Option 2 for calculating UCAP for new resources without three full years of operating history, as described in section 4.1.2. Please explain your rationale and include examples if applicable.

   Calpine supports Option 1 which uses appropriate class-average values for availability.

   However, the CAISO should more fully describe the process for creating a UCAP value for imports. Would each resource-specific import be required to submit three years of GADS data? How would the CAISO handle an external resource which is part of a reserve-sharing group that backfills for forced outages (within the hour or longer?) How would a UCAP value be established for a “portfolio” or “pool” of qualifying import resources?

iii. Please provide your organization’s feedback on the ISO’s approach to use the historical availability during the RAAM hours for years prior to 2019 and the historical availability during the 20% tightest supply cushion hours in years 2019 and beyond for hydro resources, as described in section 4.1.2. Please explain whether this approach is necessary or preferred to the standard UCAP calculation to reflect hydro availability.

   No Comment.

iv. Please provide your organization’s feedback on the modifications for UCAP counting rules for storage resources as described in section 4.1.2. Please explain your rationale and include examples if applicable.

   No Comment.

c. Please provide your organization’s feedback on the System RA Showing and Sufficiency Testing topic as described in section 4.1.3. Please explain your rationale and include examples if applicable.

   Again, we look forward to the preliminary assessment.

d. Please provide your organization’s feedback on the Must Offer Obligation and Bid Insertion Modifications topic as described in section 4.1.4. Please explain your rationale and include examples if applicable.

   i. Please provide your organization’s feedback on generally defining variations to the must offer obligations and bid insertion into the day-
ahead market based on resources type, as described in Table 12 in section 4.1.4. Please explain your rationale and include examples if applicable.

No Comment.

e. Please provide your organization’s feedback on the Planned Outage Process Enhancements topic as described in section 4.1.5. Please explain your rationale and include examples if applicable.

Calpine continues to support Option 1 – which is to establish a higher planning reserve margin for shoulder months. This eliminates last-minute POSO requirements, allows certainty for resources seeking to schedule outages and reduces the incentive for participants to hold-back capacity “just-in-case” an outage is cancelled and a POSO is created.

Should the CAISO choose its “no change” option, it should consider, as Calpine suggested in response to the 2nd Revised Straw Proposal, advancing the RA showings date to T+75 -- which would provide an additional month to assess deficiencies (both RA capacity and portfolio), allow resources to find substitute capacity and employ, as needed, current tariff mechanisms such as CPM.

f. Please provide your organization’s feedback on the RA Import Requirements topic as described in section 4.1.6. Please explain your rationale and include examples if applicable.

i. Please provide your organization’s feedback on the issue of whether firm transmission service on the last line of interest to the CAISO BAA will ensure reliability and is feasible, or whether the CAISO should require point-to-point, source to sink firm transmission service as originally proposed, as described in section 4.1.6 page 68. Please explain your rationale and include examples if applicable.

First, Calpine supports the key elements of the CAISO proposal as delineated on pages 62 and 63 of the proposal. Pseudo-ties (PT) and Resource-specific, System Resources (RSSR) can be used to dedicate capacity to the CAISO (as required by the attestation), and firm transmission, at a minimum, to the injection point will help ensure deliverability to the CAISO. Using and limiting imports to PT and RSSRs would allow specific modeling (including MSG functionality) and Masterfiles that can adequately recognize the dispatch constraints of resources.

However, given that there is virtually no dynamic transfer capability available from the PNW, the CAISO should confirm that their market
model is capable of representing and optimizing non-dynamic RSSRs in that region.

Calpine also supports an early demonstration (at the time of the RA showing) of firm transmission to the intertie (the last line of interest). We could support a full source to sink requirement if in fact data would indicate that in spite of multiple transmission paths to the last-line-of-interest, the frequency of upstream transmission curtailment creates reliability concerns.

ii. Please provide your organization’s feedback on other BAA’s systems bordering the CAISO and whether such a “last line of interest” proposal is feasible and would effectively support RA import capacity dependability and deliverability, as described in section 4.1.6 page 68. Please explain your rationale and include examples if applicable.

Calpine believes the CAISO proposal is workable regardless of the configuration of the adjacent BAAs. Each CAISO injection point is well defined and the lines and ownership (as well as OATT PTP or Network rights) interconnected to those injection points are known or demonstrable.

However, there are circumstances that require further investigation. For instance, if an injection point is at 230 kV (e.g., Mead 230kV), but is adjacent to a 500 kV substation, would the “last line of interest” only require rights across the 500/230 transformer or something reaching much further out into the system?

iii. Please provide your organization’s feedback on whether a non-compliance penalty or other enforcement actions are necessary if delivery is not made under firm transmission service, as described in section 4.1.6 page 69. Please explain your rationale and include examples if applicable.

If an import is resource-specific and has obtained firm transmission on the last line of interest, it seems an outage that results in non-delivery is very similar to, and should be subject to the same rules as an internal resource (that is, no incremental non-compliance penalties.)

iv. Please provide your organization’s feedback on how to convey the last line of interest, as described in section 4.1.6 page 69. Please explain your rationale and include examples if applicable.

See above.

v. Please provide your organization’s feedback on the options proposed in section 4.1.6 and any other potential mechanisms that would best ensure RA imports are dependable and deliverable if the CAISO were to
adopt, as an alternative, a “last line of interest” firm transmission service requirement. Please explain your rationale and include examples if applicable.

No further comments.

g. Please provide your organization’s feedback on the Operationalizing Storage Resources topic as described in section 4.1.7. Please explain your rationale and include examples if applicable.

No further comments.

2. Flexible Resource Adequacy

Please provide your organization’s feedback on the Flexible Resource Adequacy topic as described in section 4.2. Please explain your rationale and include examples if applicable.

No further comments.

3. Local Resource Adequacy

Please provide your organization’s feedback on the Local Resource Adequacy topic as described in section 4.3. Please explain your rationale and include examples if applicable.

a. Please provide your organization’s feedback on the UCAP in Local RA Studies topic as described in section 4.3.1. Please explain your rationale and include examples if applicable.

No further comments.


Please provide your organization’s feedback on the Backstop Capacity Procurement Provisions topic as described in section 4.4. Please explain your rationale and include examples if applicable.

a. Please provide your organization's feedback on the Capacity Procurement Mechanism Modifications topic as described in section 4.4.2. Please explain your rationale and include examples if applicable.

No further comments.

b. Please provide your organization’s feedback on the Making UCAP Designations topic as described in section 4.4.3. Please explain your rationale and include examples if applicable.

No further comments.

c. Please provide your organization’s feedback on the Reliability Must-Run Modifications topic as described in section 4.4.4. Please explain your rationale and include examples if applicable.

i. Please provide your organization's feedback on an appropriate availability incentive design to apply to RMR resources after the removal
of the RAAIM tool, as described in section 4.4.4. Please explain your rationale and include examples if applicable.

No further comments.

d. Please provide your organization’s feedback on the UCAP Deficiency Tool topic as described in section 4.4.5. Please explain your rationale and include examples if applicable.

No further comments.

5. Please provide your organization’s feedback on the implementation plan, including the proposed phases, the order these policies must roll out, and the feasibility of the proposed implementation schedule, as described in section 5. Please explain your rationale and include examples if applicable.

No further comments.

6. Please provide your organization’s feedback on the proposed decisional classification for this initiative as described in section 6. Please explain your rationale and include examples if applicable.

No further comments.

Additional comments

Please offer any other feedback your organization would like to provide on the Resource Adequacy Enhancements fifth revised straw proposal.

Thanks.