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Submit comment on 2023 draft policy initiatives catalog

Annual policy initiatives roadmap process - 2023

1. Please submit comments on the draft 2023 catalog. You may upload documents using the "attachments" field below: *

CalWEA obviously supports item 6.3.1 of the draft policy initiatives catalog -- Reform of the Deliverability Assessment Methodology, which CalWEA submitted jointly with CESA. Here, we briefly explain why CAISO should immediately address this item, summarize the reforms that we believe require discussion, and summarize our concerns with the truncated stakeholder process that the CAISO held in June to consider reform of its storage dispatch assumptions; we urge CAISO to reconsider these assumptions.

Deliverability methodology reform should be an immediate CAISO priority

CalWEA believes that the CAISO's deliverability assessment methodology is inappropriately conservative and is therefore preventing resources that could provide RA capacity during the vast majority of hours, including during the critical evening net-peak-load period, from interconnecting to the system and providing RA capacity. The substantial reforms that we advocate would, we believe, allow the grid to immediately handle more than 10 GW of additional wind, solar and storage capacity.

Re-evaluating this methodology warrants the CAISO's full and immediate attention, given the CAISO's and state elected officials' concerns about mid-decade reliability, which are so high that $1.6 billion in state funds are being loaned to PG&E in hopes of extending the life of Diablo Canyon. In addition, reform is necessary for the same reason that the CPUC is restructuring its Resource Adequacy (RA) program: to ensure that energy needs are met in all high-risk hours, particularly in all evening summer peak hours, not under the very rare and extreme conditions that are represented in the CAISO's current deliverability methodology.

Moreover, the CAISO/PTO reassessment reports recently received by many developers are causing significant delays for many projects that were scheduled to come online in the next few years, which will compound the state's mid-decade reliability challenges.

Finally, and very importantly, making more efficient use of the existing grid will enable a large volume of resources to interconnect and provide RA capacity without network upgrades. In turn, this will assist load-serving entities in meeting their RA requirements, help the state achieve its SB 100 goals, reduce environmental impacts, and substantially reduce costs to ratepayers by reducing transmission upgrade costs and increasing competition in the RA market.

Summary of assumptions that require re-evaluation

The assessment methodology that the CAISO uses to determine whether a resource qualifies for FCDS or PCDS is exceedingly conservative. We note that the CAISO, CPUC and Energy Commission stated in their January 13, 2021, letter to the Governor regarding the rolling outages in August 2020, that "there was no single root cause of the August outages, but rather, […] the three major causal factors contributing to the outages were related to extreme weather conditions, resource adequacy and planning processes, and market practices." There was no N-2 condition, unusual dispatch conditions or extensive resource curtailments – basically, there was a shortage of resources available in the evening hours which has rapidly become the most critical period for resource adequacy and should be studied with a relevant slice-of-day deliverability assessment.

A more reasonable methodology would remove a major hurdle that could enable a substantial number of projects – those that are in advanced stages in other aspects of their development – to complete development by mid-decade. In addition, existing projects with Energy Only status could attain the deliverability status that they deserve.

The specific assumptions that we recommend be evaluated in a stakeholder process are as follows:

- The **CAISO's High System Need ("HSN") operating scenario** unreasonably includes three system conditions that are assumed to be occurring simultaneously:
    - an N-2 condition;
    - system dispatch conditions where all generation in a particular area is operating at near-maximum Net Qualifying Capacity ("NQC"), and
    - a "peak-net-load condition," where the system is most likely to experience a generation shortfall.

  The CAISO should invite stakeholders to consider whether these extreme simultaneous conditions are appropriate in the context of a portfolio that is now increasingly centered around variable energy and use-limited storage resources, rather than the dispatchable generation resources that the present methodology was designed for.

- The CAISO's **Secondary System Need ("SSN") operating scenario** represents similar assumptions; however, this scenario has much less to do with delivering resources to load at the time when RA capacity is really needed – during the evening net-peak-load condition as represented by the HSN scenario. The SSN scenario is, instead, focused on avoiding renewable generation curtailment during times of high gross system load and high production from variable energy resources when system need for this RA capacity is not critical. Hence, applying the SSN condition is preventing resources that could provide RA capacity at the time of real system need from attaining deliverability status based on potential resource curtailment during times when such curtailment is not a system concern. The CAISO should invite stakeholders to consider whether eliminating the SSN scenario in the deliverability assessment is warranted.
- The CAISO's **process for granting resources local RA credit**. Currently, a resource located in a Local Reliability Constrained Area (LCRA) is required to qualify as a system RA resource before it is qualified to provide local RA. Qualifying as a system RA resource could require transmission upgrades to deliver energy from, say, a battery project in the Los Angeles Basin LCRA to the Bay Area LCRA, preventing it from providing local RA capacity in the Los Angeles LCRA.

The CAISO should invite stakeholders to consider whether the requirement for local resources to attain system RA status should be eliminated. (Local resources would need to be studied under a local deliverability scenario to obtain a local RA capacity qualification.)

CAISO should revisit its storage dispatch assumptions

CalWEA appreciates that CAISO held a brief stakeholder process in June (one stakeholder meeting and one round of comments) to consider only its storage operations assumption in its deliverability assessment methodology. CalWEA and CESA were joined by several other stakeholders in recommending that storage be assumed not to be discharging at all when solar is still operating at 6 p.m. in the summer, but CAISO decided only to reduce storage output levels from 100% to 80%. Even this small change has resulted in several more projects obtaining FCD status.

We do not feel that CAISO staff adequately or properly responded to the points we (and several other parties) raised during its very limited stakeholder process on this issue. CAISO did respond to our, and others', comments in its traditional matrix. But CAISO did not respond to the main points of our comments. To briefly summarize, the CAISO did not respond to the following three points:

- CAISO finds a "demonstrated risk" of supply shortages during the gross-peak (low-risk) SSN study only because it has moved hour-ending 18 (HE18) to the SSN window. HE 18 properly belongs in the High System Need (HSN, net peak) window, where it has resided in all previous CAISO deliverability assessments. Further, CAISO relies on information only from HE-18 for one sample day (ignoring HE15 to HE17, which have always been SSN hours) to support its proposal.
- The need for the SSN test is itself questionable. As CAISO has indicated, it focuses mainly on the local curtailment of supply resources, which does not translate to lack of system reliability since other system resources are available to meet load.
- It is not reasonable to assume that future energy storage resources will operate as do the limited existing storage resources on the system today. Storage is required to follow CAISO's optimal/secure dispatch to shift solar production to the hours of maximum need, which will guard against discharging when solar is producing at high levels.

We encourage CAISO to more fully consider whether greater reforms to its storage assumptions are warranted.