Stakeholder Comments – 2022 CAISO Local Capacity Requirements Study Criteria, Methodology, and Assumptions

Submitted by	Company	Date Submitted
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SCE appreciates the opportunity to provide the comments on the CAISO's 2022 Local Capacity Requirements (LCR) study criteria, methodology and assumptions dated October 23, 2020[1].

SCE requests the CAISO provide additional information on how hydro resources are treated in the CAISO LCR study. As SCE understands it, the CAISO LCR study is key to identify local area needs, spanning from the next year to the next five years, to ensure grid reliability. The end results of the LCR study not only provide requirements for resource adequacy (RA) compliance, but also may serve as a guidance regarding potential future needs, such as whether new resources should be developed in a local area. To this end, the LCR study assumptions should be consistent with RA compliance evaluation criteria and reflect potential future local needs.

SCE is under the impression that the CAISO LCR study assumes the full capacity of hydro resources, i.e., Pmax of the resource (or another value that's potentially higher than the monthly RA value). If this understanding is correct, then there can be consequences. When the LCR study derives the requirements based on a capacity value for a resource that's higher than either what the resource can realistically provide or its RA value during annual or monthly showings, the LCR study may incorrectly and implicitly lead to a conclusion that all existing resources are able to meet the local requirements and new resources are not needed. However, once RA resources are shown, there can be a deficiency, in either capacity or expected energy. Additionally, such result may mask a true need for new resources in a local area.

More broadly, it appears that the local area requirements can be affected under the study objective of maintaining maximum import capability (MIC). In other words, in order to maintain MIC, local generation is assumed to be at a high level (e.g., at full capacity or maximum generation level), which would then increase the requirement for the local area[2]. This approach of assuming a high generation level for local resources in order to maintain MIC should be further evaluated and explained.[3] The CAISO should clarify why the objective here is to maintain MIC and whether there are negative impacts to MIC

[1] Draft 2022 Local Capacity Area Technical Study, available at http://www.caiso.com/Documents/2022LocalCapacityRequirementsDraftStudyManual.pdf

[2] See Presentation, at 20: "For Sierra, the impact is driven by COI imports as well as PG&E-owned Northern Hydro River System and the State Water Projects; For the most part, there will be rather large decreases in import allocations and generation deliverability for rather small decreases in local area LCR requirements; Showings will likely rely on the above mentioned resources. As such, the ISO would need to account for their full RA capacity", available at http://www.caiso.com/Documents/Presentation-2022LocalCapacityTechnicalStudyCriteriaMethodologyandAssumptions.pdf.

[3] SCE asks that the CAISO fully document the reason or reasons for assuming high amounts of generation in the local areas. If SCE's understanding described in this paragraph is incorrect, SCE would appreciate clarification to better understand the process and the implications for local needs based upon those assumptions.

holders if this objective is removed. There should be further clarity on the interaction between MIC and the LCR study, because it appears that MIC may be driving the assumption of high local generation.

In summary, for the reasons described above, the CAISO should provide additional information on how hydro resources are treated, in particular, the CAISO should address:

- What value for hydro resources is used in the LCR study? If RA value is used in the study, please clarify if the RA value is based on the existing methodology (such as using NQC value at or close to the Pmax) or the RA value that is based on the new alternative methodology, which provides an option for a hydro resource to receive a lower RA value and exempted from RAAIM for fuel-related availability issues.
- If the RA value is based on the existing methodology, the issues described in the comments above would apply and should be addressed by the CAISO.