

Comments on CAISO 2022 Local Capacity Technical (LCT) Study Manual

Submitted by	Company	Date Submitted
Mike Pezone mapz@pge.com (415) 973-6093	Pacific Gas and Electric Company	November 17, 2020

PG&E acknowledges the tremendous efforts by the CAISO staff to develop the Draft Study Manual of the 2022 Local Capacity Technical (LCT) Study. PG&E offers the following comments to better understand the procurement needed to meet the minimum capacity requirements.

The CAISO has already committed to providing additional improvements to the load and battery charging capability graphs during the upcoming November 17 stakeholder meeting which are important aspects to understanding the procurement needs.

In addition, PG&E provides the comments below.

1. PG&E requests the CAISO to include details of the battery storage charging constraints assessment in the study manual.

PG&E requests the CAISO include details of study assumptions and methodologies that are used to assess the battery storage charging constraints. In the previous cycle, high-level assumptions were provided in the LCT reports. In the upcoming cycle, PG&E suggests that the details for battery storage charging constraints assessments are provided in similar detail as in the existing section of Studies by Performance Level. As storage charging assessment is a relatively new practice, it would be very helpful for stakeholders to better understand the details of the assessment in order to interpret the results and contribute with further comments.

2. PG&E requests that the CAISO conduct analysis to confirm that the interconnection process that identifies energy storage charging constraints and the appropriate mitigations is consistent with the LCR methodology that will be used to assure that reliability standards are met.

In the previous year’s results the CAISO indicated that if “uplift is not provided the CAISO may use its back-stop authority to assure that reliability standards are met throughout the day¹” in consideration of storage charging requirements. The CAISO’s interconnection process for

¹ [CAISO 2021 Local Capacity Technical Study](#), page 25.



energy storage performed under GIDAP will only consider discharge mode consistent with CPUC counting rules for deliverability studies. The reliability studies performed under GIDAP consider charging mode, but does not require upgrades for transmission congestion constraints that can be mitigated with congestion management.

If an energy storage project wants uninterrupted charging similar to firm load service, it must apply to the transmission owner requesting firm load service. The charging constraints that are assumed mitigated by congestion management in interconnection studies appear to be at odds with the LCR methodology that the CAISO is proposing to use as its back-stop procurement authority for. It is unclear if the transmission constraints identified in the LCR methodology that maximize imports into a local area will be consistent with the charging constraint in the same interconnection studies for storage resources seeking to interconnect to that same local area under a different set of study conditions. As such, PG&E requests that the CAISO conduct analysis to confirm the consistency between interconnection studies and the LCR studies.

In addition, PG&E also request guidance on the following questions:

- 1) When considering the storage resources that contribute to the charging constraints, how will the hybrid and co-located resource storage components in a local area that are planning to access the ITC count towards the charging constraints? And what are the assumptions for those resources in the LCR study?
- 2) For charging constrained LCR areas, what is the specific CAISO process that will be used to mitigate a charging constraint?
- 3) How will the CAISO assess charging constraints for resources shown for system requirements and have local attributes that could contribute towards a local charging constraint?

3. The CAISO LCT Study Manual should be updated to reflect how the forecasted hourly load profiles and peak day forecasts profiles are developed.

The Study Manual indicates that the latest information from the CEC Technical Study is used for the local area assessments, yet there is no additional detail describing the purpose of the two different load forecasts that are included in the results. Additional detail on how this is derived for local areas will be helpful to understanding this important assumption used in the analysis.