

## Comments of Pacific Gas & Electric Company

### Updates to the Local Capacity Technical Study Criteria – Straw Proposal

Submitted by	Company	Date Submitted
Jared Rist (415-973-3764)	Pacific Gas & Electric	August 1, 2019

Pacific Gas and Electric Company (PG&E) offers the following comments on the California Independent System Operator’s (CAISO) Local Capacity Technical Study Criteria straw proposal.

PG&E would like to reiterate that while PG&E supports the CAISO opening this initiative to update and review the Local Capacity Technical Study criteria, we urge CAISO to use this initiative take on a broader scope and consider necessary changes to the local capacity planning process to support the evolving RA framework in California, the changing resource mix, and the evolving needs of the system over the coming years. As we noted previously, the CPUC also appears to support undertaking such a holistic review of local RA and PG&E would advocate close coordination.

PG&E recommends the CAISO adopt the following high-level principles in its review and update of the Local Capacity Technical Study (LCTS) methodology:

- Transparency and Clarity:** As PG&E has repeatedly noted in comments, the current LCTS methodology is opaque. The CAISO has repeatedly referred stakeholders to the Study Manual on its methodology, but this does not provide any details on the specifics for determining requirements such as the resources adjusted between contingencies for an N-1-1. Stakeholders have little or no opportunity to review the underlying assumptions, methodology, and inputs that go into determining the local area and subarea needs, only some of which are identified and conveyed to the CPUC as Local Capacity Requirements (LCR) that will drive the procurement of local Resource Adequacy (RA).

In addition, clarity is needed on how the CAISO is envisioning the implementation of the Bulk Electric System (BES) definition. Non-BES elements are evaluated under ISO Planning standards, but clarity is needed to understand if this is intended to encompass the contingencies evaluated or the facilities constrained under contingency. Finally, non-consequential load drop could be an appropriate solution to reduce the minimum capacity requirement and clarity is needed on whether the CAISO will identify the recommended locations for the load drop in specific areas.

- Full alignment between standards-based requirements and procurement:** The goal of a revised and updated LCTS process should be to fully inform the RA procurement

process about all known local needs, in order to ensure that the right resources (with the right combination of characteristics, located in the right areas and subareas of the system), are identified with sufficient advanced planning runway to allow efficient and cost-effective procurement by Load Serving Entities (LSEs). PG&E notes that the new three-year forward local requirement adopted by the CPUC will provide greater runway to plan for and procure new resources, where needed, and to identify cost-effective transmission upgrades and alternative mitigation, such as energy storage and demand response, where appropriate.

- **Accurately reflect the changing resource mix and hourly load variation:** Resource policy in California is driving the retirement of conventional gas-fired resources that historically provided a wide range of resource attributes bundled together and were generally dispatchable to the same predictable level of output at most times of the day and year. This led to the application of single hour “snapshot” capacity planning processes, based upon a relatively simple assumption: if the resources in a given area are capable of meeting the worst single hour stressed system condition (1-in-10 peak load, under a set of prescribed contingencies), then that resource mix can safely be assumed to be sufficient to meet any less severe conditions, of whatever duration, which might occur at other times.

However, planning processes that rely on this single hour snapshot assumption do not appropriately account for the evolving resource mix in California and hourly load variations from the peak, with the increasing penetration of variable renewables and energy-limited resources, such as energy storage and Demand Response. With the new resource mix, it is no longer safe to assess local area needs based on a single hour snapshot, and to apply a single capacity number as the appropriate basis for procurement of local RA for the entire year. PG&E believes that CAISO should use this initiative to begin developing and discussing with stakeholders the tools and methodology that will appropriately account for the temporal nature of resource contributions and hourly load variations, including the seasonally variable nature of renewables, as well as the limited duration of energy storage and demand response use limitations. A template for how this can be done was already developed in the Slow Response DR discussion and would be a good starting point for any new methodology developed here.

PG&E appreciates the considerations that have so far been made in the issue paper, however without these three principles stated above, we believe this initiative will fall short of accomplishing some of the important changes we feel are needed in the local capacity technical study process.

PG&E understands that the burden of evolving to a new LCTS methodology that better meets the high-level goals articulated above will be great, and that additional CAISO personnel and resources may be required to perform the necessary studies. Nevertheless, PG&E believes it is in the best interests of all customers to do so, because the cost of not conducting transparent local capacity studies that are sufficiently detailed and more fully aligned with RA procurement – and which therefore increase reliance on costly backstop procurement to fill in the remaining unidentified needs – is likely to be far greater.

CAISO feedback on PG&E issue paper comments:

In the straw proposal the CAISO responded to PG&E's original comments regarding these principles and considerations for the initiative by stating that these issues had been addressed in the straw proposal or that there was another ISO process that we had been directed to in addressing these concerns. PG&E would like clarity on what the appropriate ISO process for addressing our concerns with the local capacity studies criteria if not through this initiative. We appreciate the work that has been done and look forward to a revised straw proposal that will address these issues.