## Comments of Calpine Corporation on

## LCR Technical Report

## Final Draft

Comments Submitted: 4/22/2020 By: Mark J Smith

## **Summary:**

Calpine supports the LCR Technical Report and specifically, the inclusion of all of the contingencies considered in TPP. Calpine's recommendation, which was adopted in this study scope and technical report, was as follows:

Calpine suggests that the scope be revised to ensure that the Local Capacity Technical studies address the same set of contingencies as those required under the revised NERC Transmission Planning (including TPL-001-4) standards.

This allows LCR studies, transmission planning and resource development to equally consider all constraints on the grid. This change now appropriately includes less common, but significant contingencies (such as T-1-1 contingencies addressed by PG&E in comments) that must be managed within the 30-minute emergency response time required by reliability standards.

Additionally, the Technical Report beneficially includes an analysis of storage/charging limits for certain of the local areas and sub-areas. These initial findings are striking, in that it appears there *may already be more storage (in terms of capacity) approved and under construction in some areas than can be recharged* given the combination of import limits and load shapes. Additionally, it appears that the storage being developed *does not have sufficient discharge duration* to meet the load duration. (See generally the results for South Bay/Moss Landing).

Calpine has reviewed the conclusory information provided by the CAISO, but has several questions about the inputs, calculations and results of the storage analysis. We ask that in the 2020/21 LCR Studies, the CAISO provide the models, spreadsheets and input variables used to perform this analysis.