



10/8/2020

California Independent System Operator
250 Outcropping Way, Folsom, CA 95630

CAISO Transmission Planning:

Vistra Corp. respectfully submits comments in response to the CAISO's 2020-2021 Transmission Planning Process, Phase 2, Reliability Assessment and Study Updates. In the 2030 Draft Local Capacity Requirement Study Results, the CAISO shows that the Greater Bay Area has an overall 7,455 MW local capacity requirement of which there is a 111 MW deficiency between this LCR and the existing generation capacity needed to meet it.¹ Vistra believes greater development of energy storage can be a highly effective tool to allow the system to meet the reliability needs shown in the LCR, both in the near term and as energy storage systems replace the local gas-fired units as they retire. However, the draft study shows there are very limited amounts of energy storage that can be added in the Greater Bay Area and its sub-areas for at least two reasons: (1) when charging exacerbates congestion on certain constraints, the mitigation approach is to restrict charging, and (2) the new maximum 4-hour storage limit.

First, Vistra believes a potential alternative to maintain reliability criteria within the Greater Bay Area and sub-areas is to upgrade certain limiting transmission facilities instead of curtailing energy storage to remain within the current limits. For example, the "Moss Landing-Las Aguilas 230 kV" constraint requires South Bay-Moss Landing sub-area to have 2,185 MW LCR.² By upgrading this line rating, the CAISO can significantly reduce the sub-area LCR and allow for additional capacity to meet the LCR while also supporting increased levels of renewable integration. This can support reliably integrating renewables through bringing lower-cost supply from Westland into the sub-area that can be stored in storage resources and reserved to serve load in the peaking hours where the system has the greatest reliability need. In addition to considering this issue in its production cost savings (economic planning study) and policy-driven (RPS transmission plan analysis) benefits, we respectfully request the CAISO consider recommending transmission upgrades to be an alternative for targeted LCR areas and sub-areas in its reliability assessments.

Second, Vistra asks the CAISO to consider delaying including the new maximum 4-hour storage limit in its modeling until the Transmission Planning Process's next iteration. We believe there is a lack of clarity on the methodology for determining the maximum 4-hour storage as well as how it would impact local resource adequacy sufficiency assessments. Specifically, slide 16 reads "approximate 4-hr storage" and we are unclear on the methodology the CAISO is using to estimate the approximate max 4-hr storage values and ask for a description of the methodology as well as insight into when this value will be updated from an approximate value to a final value used in the RA assessments. Further, based on CAISO's explanation that "once the local need passes the 4-hour mark, [storage resources] do not eliminate the local need for other local resources on a 1 for 1 MW basis"³, our understanding is 4-hour storage resources will be limited to the new maximum 4-hour storage limit. If for example the 200 MW limit on the South Bay – Moss Landing sub-area⁴ is imposed, this could significantly limit storage development in a manner that may work in opposition to goals to leverage storage to (1) serve as replacement for retiring thermal generation or (2) support increased renewable integration through consuming excess generation and reducing curtailments. Consequently, we respectfully ask to defer this item.

Sincerely,

Cathleen Colbert

Director, CAISO Market Policy

412-720-7016

cathleen.colbert@vistracorp.com

¹ 2020-2021 Transmission Planning Process, Reliability Assessment and Study Updates, September 24, 2020, Slide 27.

² *Id.*, Slide 15.

³ *Id.*, Slide 6.

⁴ *Id.*, Slide 16.