11/17/2020

California Independent System Operator

250 Outcropping Way, Folsom, CA 95630

CAISO Transmission Planning:

Vistra Corp. respectfully submits these comments in response to the CAISO's 2022 Local Capacity Requirements Draft Study Manual posted on October 27, 2020 and discussed at a public stakeholder call on November 3, 2020. We appreciate the CAISO detailing its methodology for the 2022 Local Capacity Requirement ("LCR") studies. However, Vistra reiterates its concerns in these comments that the methodology adopted for energy storage resources is overly conservative. 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 upcoming 2022 LCR study. However, the draft study methodology proposed for energy storage may be overly conservative since as we understand it: (1) when charging exacerbates congestion on certain constraints, the CAISO's mitigation approach is to restrict charging, and (2) the CAISO's new maximum 4-hour storage limit is overly conservative.

In its report, the CAISO describes its methodology for consideration of storage charging requirements as follows:

> "For all requirements and contingencies other than extreme event considerations, the ISO expects that for batteries that qualify as local capacity resource adequacy resources, the transmission and the other local capacity resources must be sufficient to recharge the batteries in anticipation of the outage continuing into the next day's peak load period."[1]

We recognize that energy storage resources that provide local Resource Adequacy ("local RA") services need to be able to hold sufficient charge to provide its local RA MW during the Resource Adequacy Availability Incentive Mechanism hours ("RAAIM hours"). Further, Vistra recognizes that an energy storage resource that provides local RA is obligated to recharge between the RAAIM hours so that it is available for the next day's RAAIM hours. We believe the CAISO is imposing an overly restrictive assumption when it assumes energy storage resource will not be able to recharge its battery between the days if there is an extended outage on the system. The capability of a specific energy storage resource to recharge is highly dependent on its specific situation. For example, during times of grid disturbances where charging energy is not available, an energy storage resource that is located near another resource type with which it holds a commercial agreement may recharge its battery with the out-of-market energy from for example a co-located or geographically proximate resource based on that agreement. We respectfully request the CAISO consider the unique energy storage resources ability to recharge rather than assuming the energy storage resource would always be charging based on grid energy.

In previous comments Vistra has raised concerns with the new maximum 4-hour storage limit in the CAISO's modeling and continues to urge the CAISO to defer the use of these maximum storage values until the next iteration of the local capacity area study. 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. Based on some of the value released by the CAISO, Vistra believes these values 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 until it can be further vetted.

Sincerely,

Cathleen Colbert

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[1] 2022 Local Capacity Area Technical Study Draft, October 23, 2020, Page 7, http://www.caiso.com/Documents/2022LocalCapacityRequirementsDraftStudyManual.pdf.