BAMx comments dated November 14, 2019
Submitted by email to: regionaltransmission@caiso.com

BAMx Comments on the CAISO's 2021 LCR Study Criteria, Methodology, and Assumptions

Introduction

On October 31, 2019, the CAISO held a web-conference to discuss the Local Capacity Requirements (LCR) criteria, methodology, and assumptions to be used in its 2021 LCR Study. The Bay Area Municipal Transmission group (BAMx)[1] appreciates the opportunity to comment on the proposed CAISO's 2021 Local Capacity Area Technical (LCT) Draft Study Manual posted on the CAISO website on October 24, 2019, as well as the information presented during the October 31st web-conference. The information presented during the web-conference has provided stakeholders with a better understanding of how the CAISO intends to perform the 2021 LCR Study. We hope that the CAISO addresses these issues raised by BAMx in response to the information presented.

BAMx Suggestions

Update Category Definitions to Align with Current Standards

The 2021 LCR study is intended to determine the minimum capacity needed in each identified transmission constrained "load pocket" or Local Capacity Area to ensure reliable grid operations[2]. Unlike the previous LCR study analysis the CAISO has conducted, the 2021 LCR Study will be evaluating the LCR need based on the entire spectrum of P1-P7 planning contingencies. Therefore, additional LCR deficiencies and import limitations are likely to be identified due to the additional contingencies being evaluated. BAMx is concerned that this methodology change seems to be out of line with the way the CAISO monitors and operates the transmission network in real-time.

Moreover, CAISO's Procedure on "Establishing System Operating Limits for the Operations Horizon" states the following in regard to evaluating higher level contingencies for operations[3]:

- "Under system intact conditions at a bus (Meaning, either all buses or bus sections are in-service), a bus section contingency will not be studied at the respective bus and no SOLs will be established unless requested to do so by the PTO. Bus section contingencies may be studied for situational awareness only.
- Stuck Breaker Contingencies will not be studied and no SOLs will be established. A Stuck Breaker Contingency may be studied for situational awareness only."

Since the updated LCR criteria would drive up the LCR needs in multiple locations and increase ratepayer costs, BAMx encourages the CAISO to separately identify the LCR needs that are

[1] BAMx consists of City of Palo Alto Utilities and City of Santa Clara, Silicon Valley Power.
[2] Draft 2021 Local Capacity Area Technical Study, p.3.
[3] Operating Procedure 3100 Establishing System Operating Limits for the Operations Horizon, Section 3.7. Study Guidelines for Non-Credible Multiple Contingencies.

based upon higher-level planning contingencies that are beyond the contingencies for operations. Such information would be helpful to the local regulatory authorities in allocating LCR requirements to the jurisdictional load-serving entities.

BAMx identified an example that illustrates that modeling higher-level contingencies to identify LCR needs leads to the procurement of the local resources even when they are not required to meet the mandatory reliability standards or to provide operational reliability. One example involving the existing LCT criteria is in the Big Creek-Ventura area, where the overall LCR need for 2024 identified in the latest LCR study is 2,577 MW.[4] The LCR value is driven by an overload on Sylmar-Pardee #1 or #2 230kV circuits following the overlapping outage of the Lugo-Victorville 500kV line and the remaining Sylmar-Pardee 230kV circuit[5]. This outage could be mitigated via Operating Procedure 7680, and therefore does not violate any of the mandatory NERC, WECC or CAISO reliability standards. However, the LCR procurement in 2024 will be based on the 2,577 MW value based on the existing LCT criteria that does not take into consideration any operating procedures that can be used for mitigation. BAMx urges the CAISO to review and eliminate the LCR needs driven by higher-level contingencies that are not required to meet the mandatory reliability standards or to provide operational reliability – or that can be mitigated by existing operating procedures.

Provide More Details on LCR Area and Sub-area Hourly Profiles

Beginning with the 2020 LCR Study, the CAISO has enhanced its study process to include consideration of availability limitations such that the CAISO can ensure sufficient energy (MWh) is available in addition to the number of MW of capacity in the local areas.[6] We support the CAISO's plans to continue to include hourly load and available resource data within its existing Local Capacity Technical Study reports going forward to guide resource procurement.

Currently, the CAISO provides two plots for each LCR subarea and area - one comprising the representative Peak Day Forecast Profile and the other showing the hourly profile for the entire year. BAMx requests that the CAISO provide the underlying data in spreadsheet format to enable stakeholders to perform a deeper-dive analysis. We also request the CAISO to provide high-level guidance in terms of a duration requirement for a local resource needed to reliably and adequately address the local requirements within each of the LCR sub-areas and areas. We understand the CAISO won't be able to perform the detailed analysis for all areas in its 2021 LCR Study as it performed for the Moorpark Sub-Area.[7] However, the CAISO's sharing of a combination of the more detailed information provided under the 2021 LCR Study and the LCR

[4] 2024 Local Capacity Technical Study, Final Report and Study Results, May 1, 2019, p.4.
[5] CAISO *2020 and 2024 Final LCR Results Big Creek-Ventura Area* Presentation, April 10, 2019, Slide #11
[6] 2020 Local Capacity Technical Study:
http://www.caiso.com/Documents/Final2020LocalCapacityTechnicalReport.pdf
[7] CAISO Moorpark Sub-Area Local Capacity Alternative Study, August 16, 2017.

Reduction studies performed under the CAISO's 2018-2019[8] and 2019-2020[9] Transmission Plans should allow load-serving entities to determine where to pursue and procure local resources that meet the various sub-area and area LCR requirements.

Conclusion

BAMx appreciates the opportunity to comment on the 2021 LCR Study Plan and acknowledges the significant efforts of the CAISO to develop this material.

If you have any questions concerning these comments, please contact Paulo Apolinario (papolinario@svpower.com or (408) 615-6630).

[8] Board-Approved CAISO 2018-2019 Transmission Plan, March 29, 2019.
[9] "Economic Assessment of Local Capacity Areas Extension of 2018-2019 Transmission Plan," CAISO 2019-2020 TPP Stakeholder Meeting, September 25, 2019.