

**Comments of Powerex Corp. on  
Western EIM Resource Sufficiency Evaluation Enhancements  
Phase 1B Workshop**

<b>Submitted by</b>	<b>Company</b>	<b>Date Submitted</b>
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Powerex appreciates the opportunity to submit comments on CAISO's February 16, 2022 Western EIM Resource Sufficiency Evaluation Enhancements Phase 1B Workshop.

The purpose of the workshop was to detail the scope of additional analysis that the CAISO intends to perform on certain key topics related to the EIM Resource Sufficiency Evaluation (RSE). Powerex supports CAISO's effort to provide additional analysis of these elements of the RSE design that continue to contribute to inaccurate RSE results. While further analysis is necessary to allow stakeholders to understand the issues, Powerex emphasizes that the purpose of Phase 1B should be to develop solutions to these issues that can be implemented without further delay.

**Load Conformance**

Powerex appreciates CAISO's proposal to further examine HASP and FMM load conformance in the CAISO BAA and its impact on the EIM RSE. As DMM has shown in its recent reporting, the use of upward load conformance results in a consistent pattern of additional and sizeable CAISO demand being added to the HASP and FMM market optimization, while consistently being excluded from CAISO's resource sufficiency requirement.

Powerex recognizes that load conformance is a tool used by CAISO operators that serves multiple purposes and that the use of load conformance does not necessarily result in a "one for one" increase in EIM Imports. However, it is clear that, (a) load conformance is often used to secure additional imports to address capacity and flexibility challenges in the CAISO BAA, and, (b) load conformance can enable CAISO to secure those imports through the EIM rather than arranging for that supply in advance, inconsistent with the foundational resource sufficiency requirement of the EIM.

While Powerex generally supports CAISO's initial proposed scope of analysis, Powerex believes that the analysis should be further developed and refined to ensure it provides stakeholders with a full understanding of the multiple consequences of load conformance on the RSE, including:

- 1) the frequency and extent to which load conformance enables CAISO to secure EIM imports to satisfy the capacity or flexibility needs of the CAISO BAA (including to meet uncertainty requirements, which may not materialize);
- 2) the frequency and extent to which increased EIM Imports can be used to help pass the Flex Test in the upcoming interval; and,

- 3) the frequency and extent to which load conformance in previous intervals results in a less restrictive (i.e., higher) import limitation during an upward RS failure.

Each of these areas will inform the enhancements that are necessary to the Capacity Test and Flex Test to address these concerns.

### **Relationship Between HASP and EIM Transfers**

Powerex shares the concern raised by CAISO staff that advisory EIM transfers that clear HASP can be used to enable additional binding non-EIM HASP exports from the CAISO BAA that would otherwise not be feasible. This outcome results in CAISO over-extending its system and negatively impacting CAISO's ability to pass RS, while also resulting in the CAISO BAA relying on EIM imports to sustain those additional export commitments. Powerex supports further analysis to evaluate this issue and inform potential solutions that can enable CAISO to limit its non-EIM HASP net exports to a quantity that can be supported without relying on EIM transfers.

### **Net Load Uncertainty**

Including an appropriate measure of uncertainty is an important component of the resource sufficiency design. While more analysis of the quantile regression methodology is necessary to ensure that approach is a workable long-term solution, Powerex believes that Phase 1B should also include a discussion of potential approaches to develop a reasonable measure of uncertainty that could be included in the RS Capacity Test on an interim basis while the quantile regression approach is reviewed in more detail.

### **Other Topics for Phase 1B**

**Pumped Load:** DMM has recently published information that approximately 500 MW of non-participating pumping load in the CAISO BAA is not being included in the CAISO's capacity test requirement. Powerex requests that CAISO evaluate this issue and implement the corrections necessary to ensure such load is properly reflected in the RSE.

**Solar Forecast Accuracy:** The CAISO's analysis of the August 2020 heatwave identified that one contributing factor to inaccurate RSE results were solar forecasts that were significantly higher than actual solar output for multiple hours during peak conditions. While the CAISO has indicated that it does not believe these differences are the result of a forecasting problem, a more detailed review of solar performance relative to the forecasts used in the RSE will help determine to what extent the issue from August 2020 continues to occur, and if any enhancements are necessary.