Comments of Powerex Corp. on
EIM Resource Sufficiency Evaluation Enhancements
Draft Final Proposal

Submitted by	Company	Date Submitted
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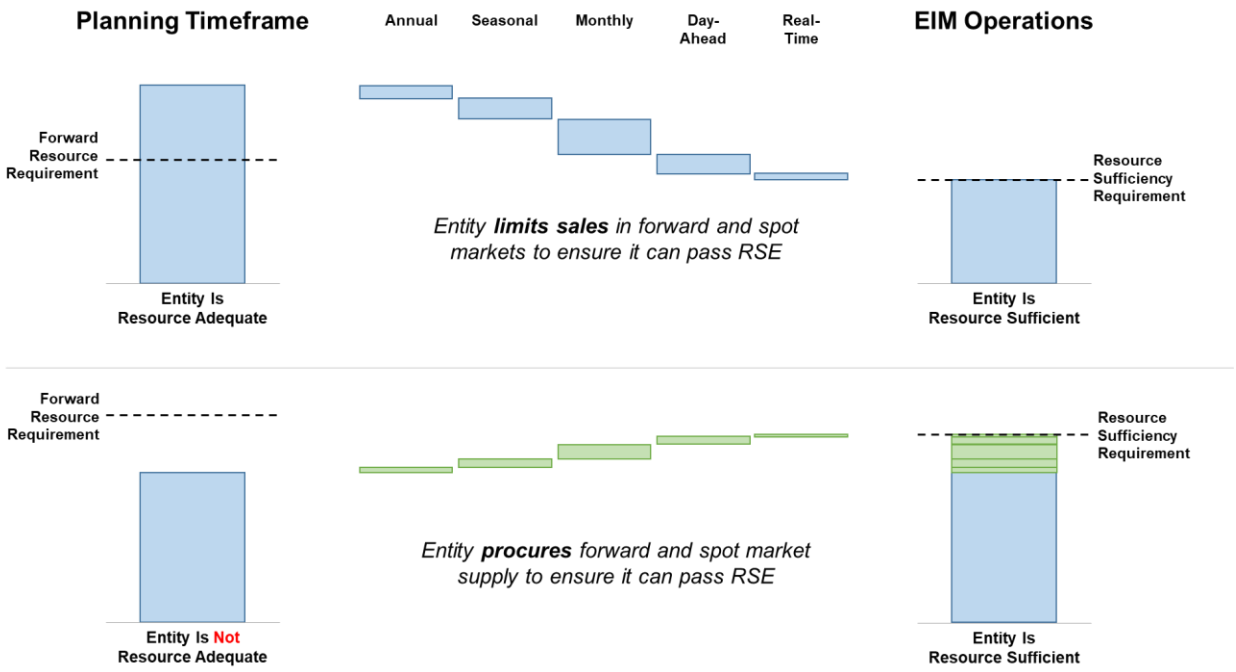
Powerex appreciates the opportunity to submit comments on CAISO's October 6, 2021 EIM Resource Sufficiency Evaluation Enhancements Draft Final Proposal ("Draft Final Proposal"). Powerex joins in the comments submitted by the EIM Entities, and offers these separate comments to express its opposition, with caveats, to the Draft Final Proposal.

As has been repeatedly acknowledged by the CAISO and raised by stakeholders over the last two or more years, a foundational principle of the Western EIM is that all entities must be resource sufficient in order to participate. More specifically, each EIM Entity (EIM Balancing Authority Area or EIM BAA), including the CAISO BAA, is expected to come to the Western EIM with sufficient resources of its own to serve its load in each hour. This requirement ensures that imports into an EIM BAA are for the purpose of displacing production from higher-cost internal resources in that BAA, when lower-cost energy is available from other participants; and ensures that exports out of an EIM BAA are for the purpose of displacing production from other higher-cost resources in other EIM BAAs. This is fundamental to the Western EIM as a market for *energy* imbalances; it was not and is not a market for *capacity* or *flexibility* to address an EIM BAA's resource *insufficiency*.

The need to verify and ensure that all EIM BAAs, including the CAISO BAA, are resource sufficient largely stems from the fact that the Western EIM does not intrude upon each entity's approach to resource planning and resource adequacy. Each entity that participates in the Western EIM retains full autonomy to determine the best path to securing sufficient capacity and flexibility *prior to* EIM operations. With Western EIM participants spanning a range of differently-situated entities, the actions necessary to achieve resource sufficiency prior to EIM operations each hour largely reflects the resource adequacy position of each entity, as illustrated below:



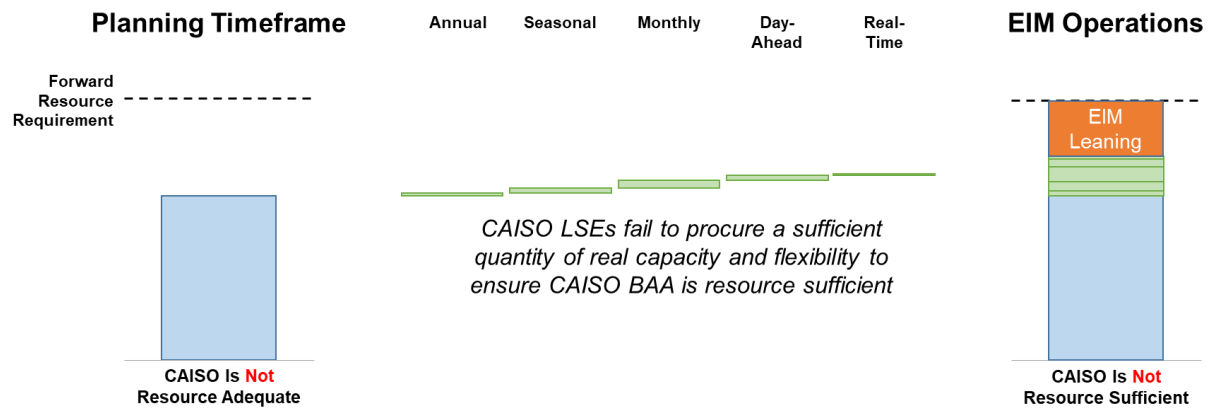
As illustrated above, regardless of whether an entity starts with a resource adequacy surplus or deficiency, EIM participants must bear the costs necessary to ensure they achieve resource sufficiency for their EIM BAA prior to each EIM operating hour.

More specifically, EIM Entities that have a resource adequacy deficit must incur the costs necessary to supplement their resource adequacy supply with additional bilateral purchases of capacity and/or firm energy products on a forward basis (annual, seasonal, monthly), potentially supplemented by bilateral purchases in the short-term day-ahead and real-time markets. These purchases can be significant with a total cost of tens of millions of dollars for an individual entity. Similarly, EIM Entities with installed and/or contracted resources that result in a resource adequacy surplus may incur significant *opportunity* costs in the form of foregone forward and/or short-term bilateral market sales to retain the supply needed to demonstrate resource sufficiency prior to EIM operations each hour.

Over the past several years, the California Public Utilities Commission, the CAISO, and the CAISO Department of Market Monitoring have provided extensive information about known issues with the California Resource Adequacy program.[1] This information demonstrates that the California resource adequacy program currently results in a resource adequacy capacity deficit of several thousand MWs, with a portion of the supply that is procured to satisfy California resource adequacy requirements not linked to any identified resources. Unlike other EIM entities with resource adequacy capacity deficits, however, the CAISO and the load-serving entities in the

[1] *See, e.g.,* Cal. Indep. Sys. Operator Corp., Resource Adequacy Enhancements, Straw Proposal – Part 1 at 7 (Dec. 20, 2018) (noting concerns that import resource adequacy rules result in speculative supply counting towards resource adequacy requirements).

CASIO BAA generally *do not* procure sufficient capacity and/or firm energy in the forward, day-ahead and real-time bilateral markets to eliminate this capacity deficit prior to EIM operations.

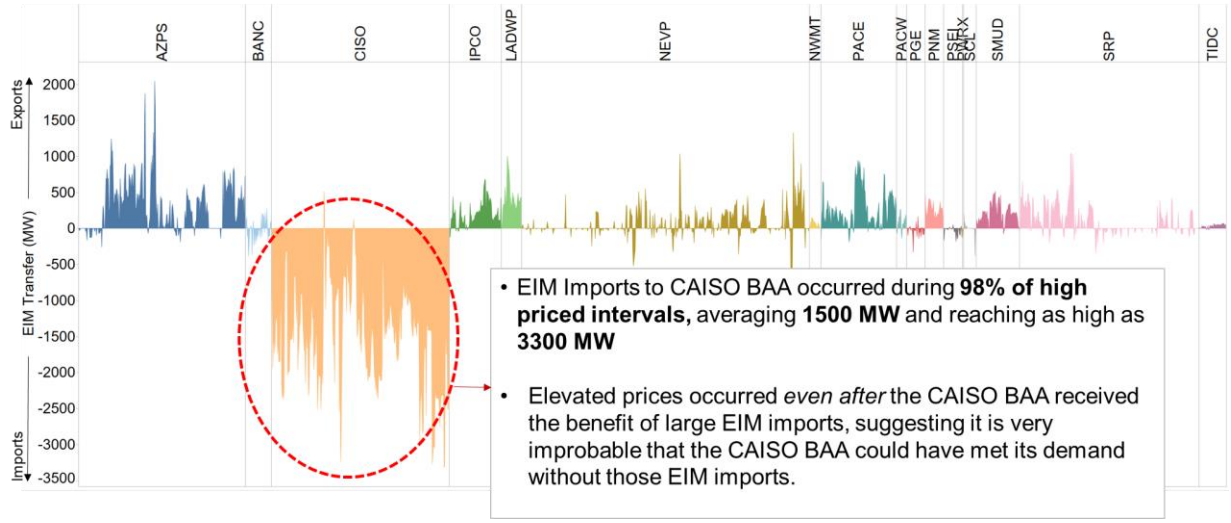


By not taking actions to address the resource adequacy gap in the CAISO BAA, the load-serving entities in the CAISO BAA are able to save hundreds of millions of dollars by using the Western EIM to fill the CAISO BAA's capacity gap in the most critical hours. Relying on the Western EIM to address resource adequacy gaps is contrary to the Western EIM's foundational principle prohibiting capacity and flexibility leaning and the clear commitment to come to the EIM resource sufficient. This results in a highly inequitable outcome where the CAISO BAA is able to import up to 3,000 MW or more from the rest of the Western EIM to fill the capacity gap left by California's Resource Adequacy program without compensating external resources for this capacity. At the same time, the reliance of the CAISO BAA on leaning to fill its resource adequacy gaps contributes to reliability challenges and price spikes throughout the EIM area footprint.

By leaning on up to 3,000 MW of EIM imports for capacity purposes, instead of purchasing capacity from identified resources in the forward markets under a well-functioning RA program, customers in the CAISO BAA benefit by hundreds of millions of dollars annually – a benefit that is inappropriately obtained through the EIM.

The extensive capacity leaning by the CAISO BAA is readily apparent from data on EIM imports for 2020-2021. The chart below shows the magnitude of net EIM exports (positive values) or EIM imports (negative values) for each EIM BAA during those intervals that the price in the applicable EIM BAA was $500/MWh or greater.

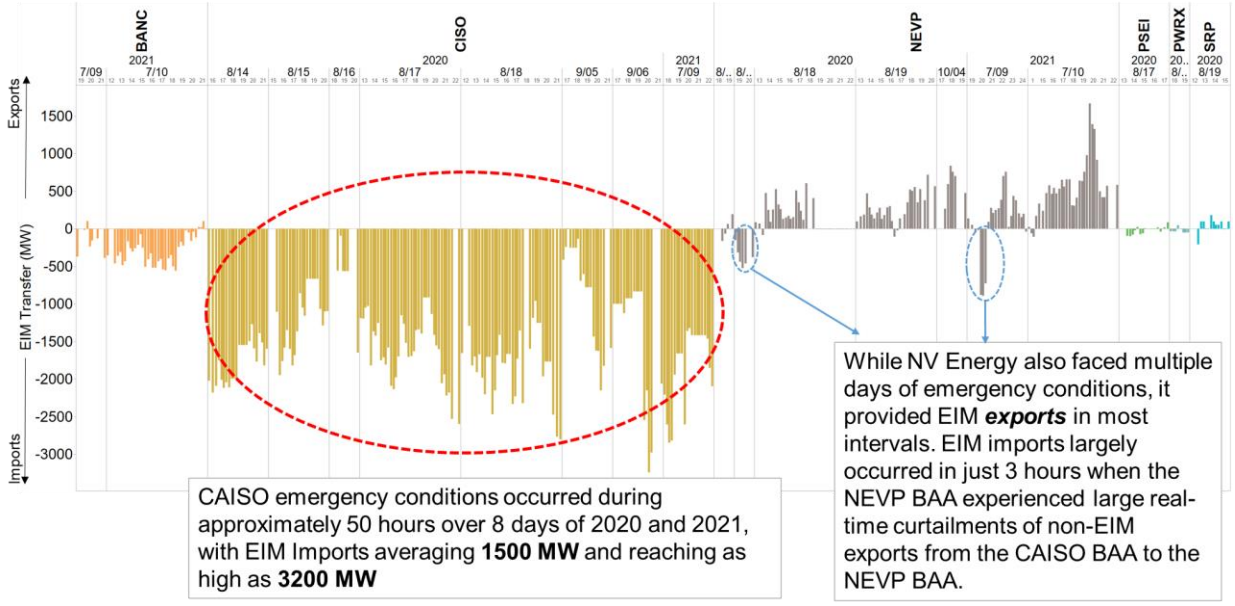
EIM Transfers During Periods when Prices $500 or Greater in the Applicable EIM BAA



It is clear that the large import volumes at these prices are not simply for the economic displacement of available internal resources in the receiving BAA (as there are limited internal resources priced at, or above, this price level in the CAISO BAA) and, instead, are being used predominantly to make up for a lack of sufficient resources in the first place. Of all EIM BAAs, it is only the CAISO BAA that has frequent and large EIM imports when EIM prices are in excess of $500/MWh.

Leaning by the CAISO BAA is also seen in EIM imports during declared Energy Emergency Alerts (EEAs). By definition, an entity in a declared EEA lacks the resources to reliably serve load. EIM transfers during declared EEAs in 2020 and 2021 are shown in the chart below.

EIM Transfers During Declared EEAs



Again, it is only the CAISO BAA that has frequent and large EIM imports during declared reliability emergencies. These imports cannot credibly be characterized as energy imbalances; these imports are clearly being used to fill the void resulting from the design of California's resource adequacy program and from the lack of actions by either the CAISO or the load-serving entities to eliminate that gap prior to operation of the EIM.

It is now clear that there has never been a properly-functioning Resource Sufficiency Evaluation as applied to the CAISO BAA since the inception of the Western EIM. Perhaps more concerning is the lack of meaningful and timely action to fix the Resource Sufficiency Evaluation, as Powerex raised concerns about the ineffectiveness of the Resource Sufficiency Evaluation—as applied to the CAISO BAA—more than three years ago.[2] These concerns became more widespread throughout the industry, as a result of the events in the summer of 2020, when extensive leaning by the CAISO BAA was readily observed. Nonetheless, substantial leaning by the CAISO BAA continued throughout the summer of 2021.

Powerex recognizes and appreciates the improved transparency provided by the CAISO and the CAISO Department of Market Monitoring, and generally supports the improvements being proposed in Phase 1 of this initiative. Powerex is concerned, however, that ***absent a significantly increased sense of urgency and a clear commitment to eliminate <u>all</u> of the numerous gaps in the Resource Sufficiency Evaluation, the extensive leaning by the CAISO BAA will likely continue for a third year in the summer of 2022***. In addition, the prolonged existence of a clearly inaccurate Resource Sufficiency Evaluation, and the extensive leaning it enables by the CAISO BAA, also raises some material doubts about the CAISO's ability to achieve outcomes consistent with its recent statements that "[c]onsistent with the 'prevention-of-leaning' concept supported by the existing EIM resource sufficiency test, the EDAM would have robust resource sufficiency requirements."[3] Until the CAISO is able to accurately gauge resource sufficiency and prevent extensive leaning by the CAISO BAA in the relatively small real-time Western EIM, it is difficult to see how entities can be sufficiently confident that a future EDAM will have effective measures to prevent leaning, particularly in light of the larger volume of transactions that would occur in an EDAM.

Powerex therefore opposes the Draft Final Proposal, as it falls far short of this initiative's Phase 1 goal of producing a Resource Sufficiency Evaluation methodology that is accurate, particularly when applied to the CAISO BAA. In Powerex's view, it is simply not acceptable for other EIM Entities to continue to be subject to the systemic and substantial uncompensated capacity and flexibility leaning that is clearly occurring to shore up the resource procurement gaps that are created by California's resource adequacy program, and left unaddressed by the CAISO's Tariff and the limited procurement activities of load-serving entities in the CAISO BAA.

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[2] *See, e.g.,* Powerex Resource Sufficiency Evaluation Presentation at the April 30, 2018 EIM Offer Rules Technical Workshop, *available at*: http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=3509B16A-3A9F-4F34-B370-914AF5C85A49.

[3] *See* CAISO Extended Day-Ahead Market (EDAM) Common Design Principles & Concepts, at 3, *available at:* https://www.caiso.com/Documents/EDAM-Common-Design-Principles-Concepts.pdf.

With regard to Phase 2 of this initiative, Powerex believes the consequences for Resource Sufficiency Evaluation failures should be explored immediately following the conclusion of Phase 1. To live up to the original vision of the Western EIM as a market for energy imbalances only, with no leaning on capacity or flexibility, it is critical that the consequences of failing the Resource Sufficiency Evaluation either directly prevent leaning by deficient entities or, alternatively, eliminate the economic benefit enjoyed by entities that choose to avoid procurement of sufficient resources prior to EIM operations.