

## Comments of Powerex Corp. on Draft 2023 Policy Initiatives Catalog

Submitted by	Company	Date Submitted
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Powerex appreciates the opportunity to submit these comments on CAISO’s Draft 2023 Policy Initiatives Catalog. As discussed more fully below, Powerex requests that the 2023 Policy Initiatives Catalog and Roadmap include a high-priority stakeholder process to identify the data, metrics, and reporting necessary to objectively evaluate the accuracy of the CAISO’s GHG attributions in the Western EIM.

Powerex believes that accurate GHG attribution is important to achieving short-term and long-term market efficiency and decarbonization goals throughout the west. While Powerex has committed to joining SPP Markets+, Powerex continues to have an interest in accurate GHG attribution in CAISO markets, as it will continue to be a participant in the Western EIM until Markets+ is operational and Powerex expects to have ongoing trade activity with California beyond that time.

**I. CAISO needs to follow through on commitments to provide transparency on the accuracy of its GHG framework**

Powerex believes that the CAISO’s attribution of greenhouse gas (GHG) emissions for Western EIM imports serving load in California is deeply flawed, and systematically enables California to import electricity from out-of-state coal generators while inaccurately attributing those imports to hydro output that is not dispatched in the EIM at all. The CAISO has also made this GHG framework a cornerstone of its EDAM design, which would significantly extend the harm caused by the framework’s flaws.

Powerex is confident in these conclusions based on available data, but it also recognizes that this data is at a BAA level; only the CAISO has access to granular data on each participating resource’s GHG attribution and each participating resource’s incremental EIM dispatch. In the absence of relevant data or analysis from the CAISO, stakeholders with a genuine interest in evaluating the accuracy of the CAISO’s GHG framework must invest the time and resources to identify and analyze available sources of data. Powerex has made this investment, and last summer it publicly shared a report containing the results of its analysis, and identifying the type of metrics that the CAISO could provide.<sup>1</sup> In its letter to the January joint session of the CAISO Board of Governors and the Western EIM Governing Body, *Vistra* detailed the type of data analysis needed to address critical

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<sup>1</sup> *The Western EIM’s Approach To Applying California’s Cap and Trade Program To Imports Is Undermining The Program’s Core Objectives.* (July 2022) [Full paper](#), and [executive summary](#).

questions regarding the GHG framework, and urged the joint bodies to direct such data and analyses be provided.<sup>2</sup> Despite these requests, and despite the CAISO's statements expressing its commitment to transparency, there remains a critical lack of data or analysis by the CAISO to allow stakeholders to answer the most basic question of the CAISO GHG attribution framework: ***how well does the CAISO's attribution of GHGs for imports into California match the generation resources that increased their output in the Western EIM?***

There is no reason for stakeholders to continue to be denied the ability to objectively evaluate the performance of the CAISO's GHG framework. Powerex therefore strongly encourages the CAISO, the DMM and/or the Western EIM Governing Body to undertake the specific analyses recommended by Vistra. Identifying the metrics to be provided for both historical periods and on an ongoing basis should be added as a high-priority initiative in the 2023 Policy Initiatives Catalog and Roadmap.

**II. Available data continues to highlight the need for more transparency: One of the largest activities occurring in the Western EIM is California imports of electricity from coal resources while attributing those imports to hydro resources that are not dispatched at all**

Powerex's analysis of available data strongly indicates that the CAISO's attribution of GHGs bears little relationship to the resources that increased their output in the Western EIM. To the contrary, perhaps the most significant outcome of the Western EIM's GHG framework has been to enable California to import large quantities of electricity produced by coal-fired generation that is inaccurately attributed to non-emitting hydro resources that do not actually increase their output.

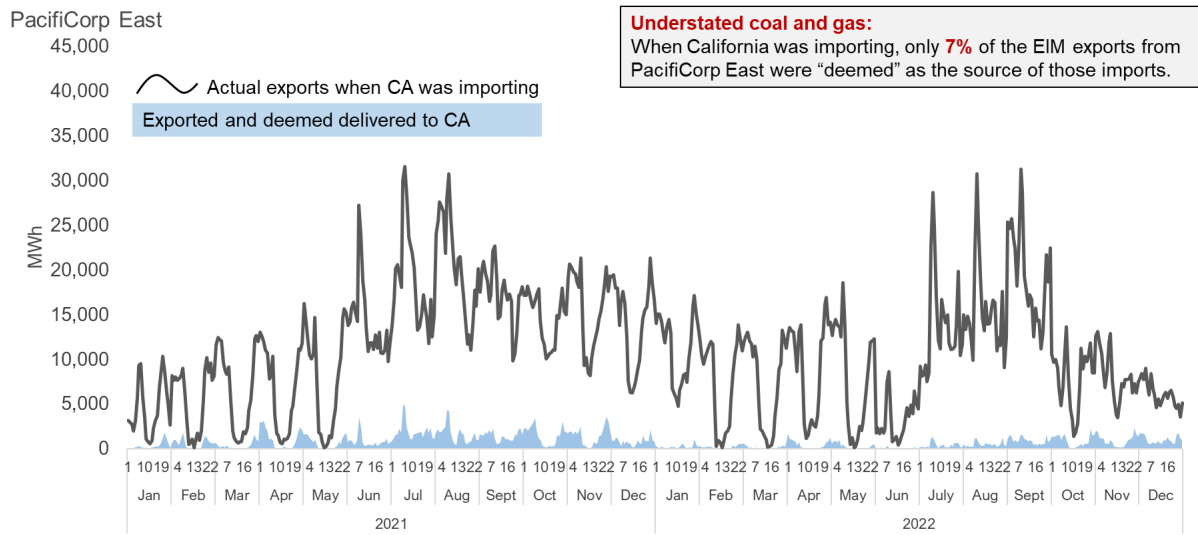
The following charts show the volume of EIM net exports (black line) during the intervals when California was a net importer of energy in the EIM, and the volume that was "deemed" to serve load in California (blue bars), for the period January 1, 2021 through December 31, 2022. Over this period, California's net EIM imports accounted for 56% of all EIM net exports, meaning that a uniform GHG attribution would result in each EIM BAA having "deemed" exports to California for approximately half of its EIM net exports. But the actual results are very different.

In particular, the PacifiCorp East (PACE) BAA—which has significant coal and high-emitting natural gas generation—consistently has disproportionately high net exports in the EIM. The PACE BAA accounts for 12% of the total generation in the EIM Area, but makes up 34% of all EIM net exports when California is importing. In contrast to its high level of EIM exports, the PACE BAA accounts for just 4% of the "deemed" imports into California. This is because, under the CAISO's GHG attribution framework, only 7% of

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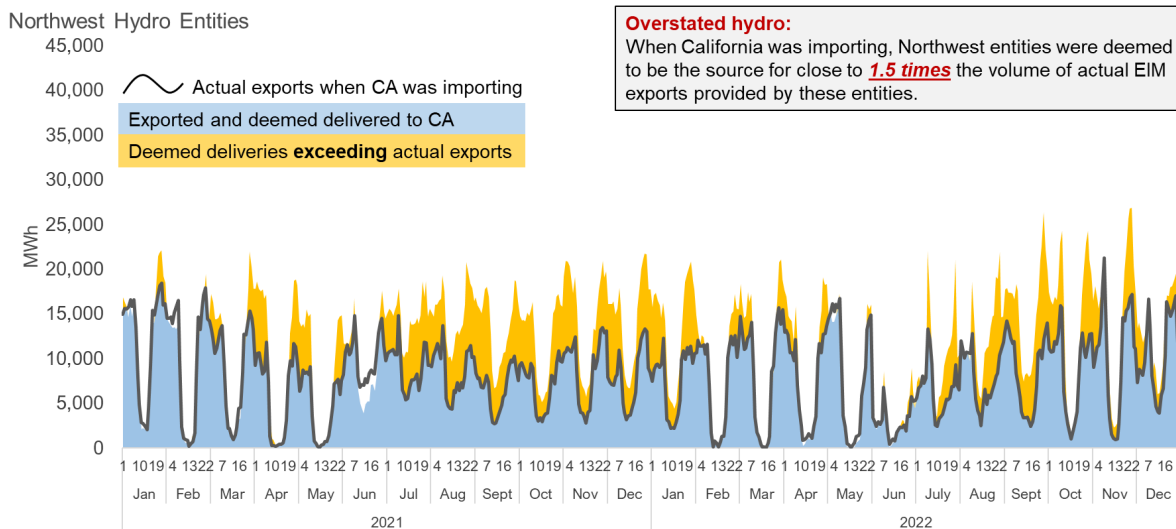
<sup>2</sup> <https://www.westerneim.com/Documents/VistraPublicComment-DecisiononExtendedDay-AheadMarket-Jan30-2023.pdf>

the PACE BAA's EIM net export volume is "deemed" to be imported into California (versus elsewhere):



Source: CAISO OASIS, Powerex WEIM Settlements data

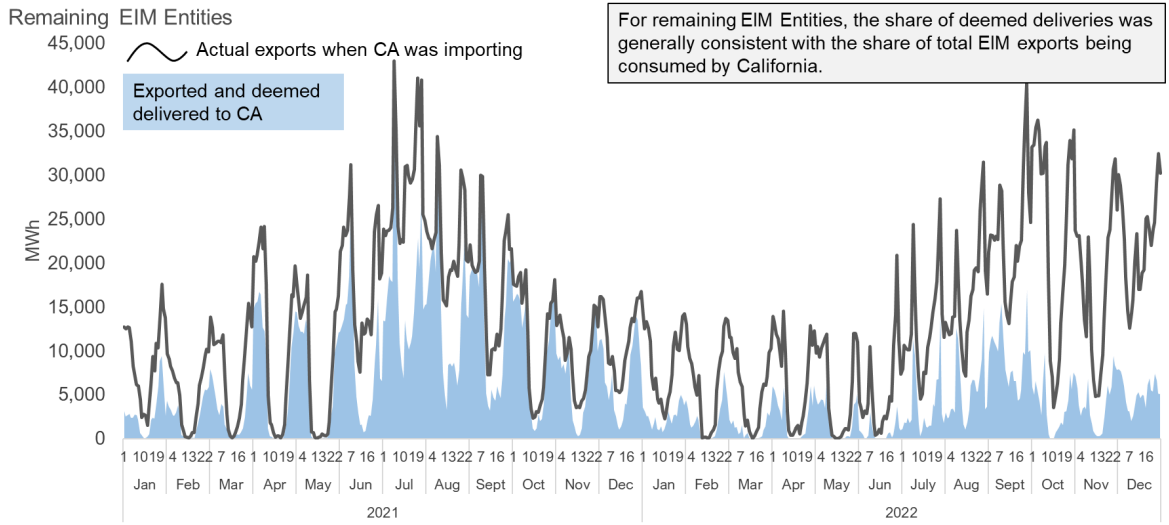
At the other end of the spectrum are Northwest hydro BAAs, which comprise approximately 51% of all generation in the EIM Area, and had a volume of EIM net exports somewhat smaller than the PACE BAA. Unlike the largely fossil-fueled generation in the PACE BAA, **more than 100%** of the EIM export volume from Northwest hydro BAAs is "deemed" to be imported into California. The CAISO's GHG attribution goes far beyond "resource shuffling" and cherry-picking the lowest-emitting incremental supply to be deemed for California; it attributes output that was not dispatched in the EIM at all. The deemed quantities in excess of actual exports are shown as the yellow shaded area, below:



Northwest Hydro includes AVA, PWX, BPAT, IPCO, PACW, PGE, PSEI, SCL, TPWR

Source: CAISO OASIS, Powerex WEIM Settlements data

The remaining EIM entity BAAs, located primarily in the Southwest, also had a similar volume of EIM net exports as the PACE BAA, with approximately half of this volume being “deemed” to be imported into California. That is, the portion of their EIM net exports deemed to serve California load was in line with the share of total EIM exports consumed by California.

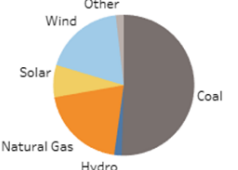

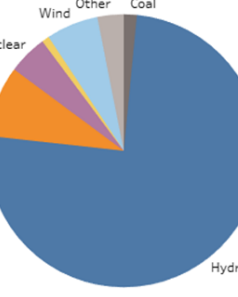
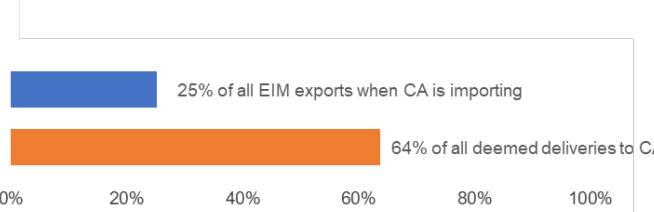
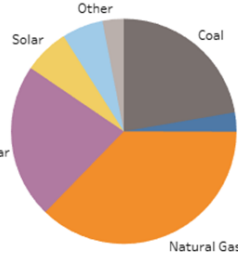
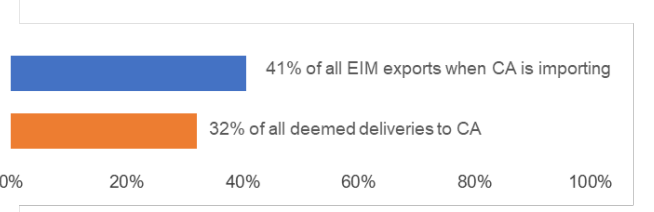


Remaining EIM Entities include **AZPS, NWMT, NEVP, PNM, SRP, TEPC**  
 Source: CAISO OASIS, Powerex WEIM Settlements data

As summarized below, the available data shows a persistent pattern in which the Western EIM:

1. Disproportionately dispatches exports of electricity from the PACE BAA when California is importing; but
2. Attributes the source of those imports as being from BAAs with hydro and other non-emitting resources, often well in excess of the actual exports coming from these BAAs.

This result is not limited to rare instances where imports from high-emitting coal units could arguably be needed to maintain reliability in California BAAs; rather, it is occurring several hours a day, day after day, throughout the year.

EIM Entity / Entities	Generation Resource Mix 2021-2022 (EIA)	% of EIM exports when California is importing vs “deemed” deliveries, 2021-2022
<b>PacifiCorp East</b> 12% of EIM Area Generation		 <p>34% of all EIM exports when CA is importing</p> <p>4% of all deemed deliveries to CA</p>
<b>NW Hydro Entities</b> 51% of EIM Area Generation		 <p>25% of all EIM exports when CA is importing</p> <p>64% of all deemed deliveries to CA</p>
<b>Remaining EIM Entities</b> 37% of EIM Area Generation		 <p>41% of all EIM exports when CA is importing</p> <p>32% of all deemed deliveries to CA</p>