

**Comments of Powerex Corp. on  
Resource Adequacy Enhancements  
Sixth Revised Straw Proposal**

<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 December 17, 2020 Resource Adequacy Enhancements Phase 1 Draft Final Proposal and Sixth Revised Straw Proposal (“Draft Final Proposal”).

As discussed further below, Powerex provides two primary comments regarding the requirements for Resource Adequacy Imports (“RA Imports”) of the Draft Final Proposal.

*First*, Powerex strongly supports the RA Import requirements of the Draft Final Proposal. In particular, Powerex believes it is imperative for the CAISO to adopt the proposed requirements in order to ensure that RA Imports represent real physical resources that will be available and deliverable to the CAISO boundary. Absent comprehensive requirements, such as those contained in the Draft Final Proposal, there will continue to be gaps in the RA framework, and market participants will continue to have financial incentives to maximize their profits by selling RA beyond the quantity of physical supply and reliable transmission service they have procured.

*Second*, some stakeholders at the January 5-7, 2021 workshop recycled erroneous claims regarding the CAISO’s proposed requirements for external transmission service associated with RA Imports. Specifically, certain stakeholders incorrectly claimed that:

- Firm transmission rights to COB and NOB are “concentrated,” posing an impediment to efficient contracting for RA Imports; and
- Transmission service priority to CAISO intertie scheduling points is irrelevant because it does not affect the quantity of energy that flows to the CAISO BAA.

These statements are wrong, and have been debunked previously. Nevertheless, their continued repetition by entities that oppose robust RA Import requirements makes it necessary to set the record straight once again.

**I. RA Import Requirements Are Necessary To Eliminate “Paper Capacity” Practices**

A key objective of the RA Enhancements stakeholder process has been to develop requirements that ensure RA Imports represent genuine physical resources that will be available and deliverable to serve load in the CAISO BAA. The current rules regarding RA Imports have fallen far short of this goal, and have enabled a range of paper capacity practices under which California ratepayers pay significant sums to marketers that do little more than deliver energy they happen to purchase in the short-term bilateral markets, or fail to deliver any energy at all.

To date, two specific forms of paper capacity strategies have been identified and discussed:

1. Capacity-only RA Imports where the marketer seeks to avoid any delivery obligation by submitting bids at or near the CAISO offer price cap;<sup>1</sup> and
2. Capacity-only or firm energy RA Imports where the marketer relies on short-term bilateral market purchases in order to perform on its delivery obligations. If the marketer is unable to procure energy in the short-term markets (or is unwilling to incur the prevailing price) it either submits a bid to the CAISO at or near the price cap to avoid a delivery obligation, or simply fails to perform on its delivery obligations and incur relatively ineffective consequences.

The Draft Final Proposal's requirement to identify, in advance, the physical resource supporting each RA Import will largely eliminate these strategies, which boil down to either avoiding delivery obligations or relying entirely on purchases in the short-term bilateral markets to meet any such obligations.

While the advance identification of a physical resource is critical, it is not sufficient on its own to eliminate paper capacity. Additional measures are needed to ensure that the identified physical capacity is not "sold twice," and is otherwise sufficient to support the RA Imports being sold to California ratepayers. Powerex believes there are two additional variants of paper capacity strategies that have been developed, which would not be eliminated by only requiring a seller to identify a physical resource.

1. *Selling the same physical supply to multiple entities or regions*

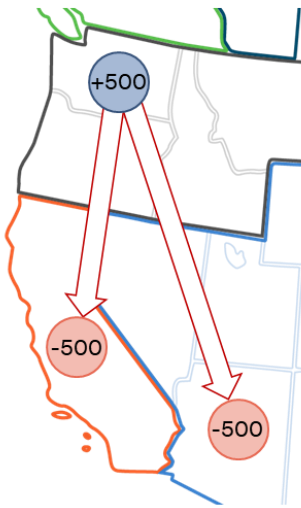
Powerex's review of public data related to last summer's heatwave events indicates that physical capacity was, indeed, sold multiple times. The following illustrative example is consistent with the activity that multiple entities appear to have engaged in:

A marketer procures 500 MW of forward physical supply in the Northwest, but makes sales commitments of 500 MW to load-serving entities in the CAISO BAA (as Import RA and/or firm energy) as well as commitments to deliver 500 MW of firm energy to load-serving entities in the Southwest. The marketer in this scenario is able to point to *some* physical capacity, but the physical capacity has been double-sold, as illustrated in the left-hand portion of the figure below.

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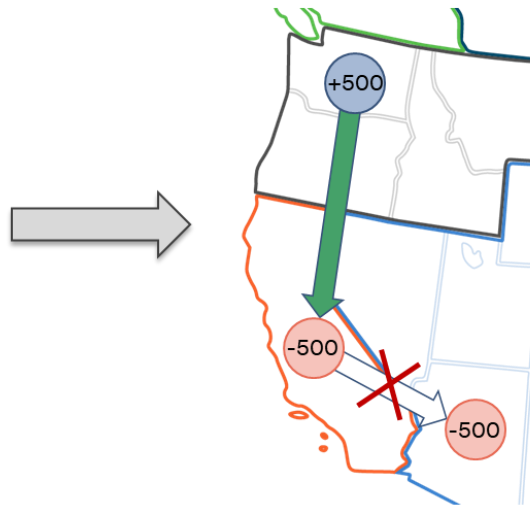
<sup>1</sup> This first paper capacity strategy was analyzed and discussed in a 2018 report by the Department of Market Monitoring, and also received significant attention from staff of the California Public Utilities Commission ("CPUC"). In October 2019, the CPUC issued an order requiring the physical delivery of energy under all RA Import contracts, at least during Availability Assessment Hours.

### Sales Commitments



- Marketer **double-sells** the same supply to two regions

### DA Scheduling Activity



- Marketer attempts to meet both obligations by:
  - 1) Importing from NW to CAISO BAA
  - 2) Exporting from CAISO BAA to SW
- CAISO curtails export to SW
- SW utility experiences delivery failure and bears reliability consequences of double-selling activity

As a result of having over-sold the capacity it has procured, the marketer in this example still relies on purchases in the short-term markets to be able to perform on all of its commitments. More specifically, the marketer is able to schedule a 500 MW import into the CAISO BAA (satisfying its RA or firm energy delivery requirement) but then also simultaneously schedules a 500 MW export at a Southwest intertie point (satisfying its firm energy delivery obligation to its customer in the Southwest). The scheduling activity that gives the marketer the appearance of performing on all of its forward sales commitments is depicted in the right-hand portion of the figure, above.

As is now well-known, however, during the reliability challenges in August 2020, the CAISO prioritized its own load and curtailed or blocked export awards, meaning the capacity that was double-sold was delivered to the CAISO BAA, but was not delivered to Southwest entities.

Powerex believes that this type of activity was extensive last summer, and was the driver of a large portion of the exports from the CAISO BAA to the Southwest during the August heat wave. It has therefore been highly inaccurate to frame such exports as Southwest entities “leaning” on the CAISO BAA. Rather, the same external supply was sold to two regions—the CAISO BAA and the Southwest—with one region (the CAISO BAA) happening to be the first entity on the delivery path.

The appropriate way to address the above scenario going forward is not to ensure that double-sold capacity is delivered preferentially to the CAISO BAA, but rather to ensure that the capacity is not double-sold in the first place. This requires all entities in all regions procuring forward supply to adopt robust measures requiring marketers to limit their sales to only the quantity of forward

supply that they have procured. In Powerex's experience, multiple Southwest entities have already revised their forward procurement practices, in light of last summer's experience, and now explicitly require the identification of physical capacity and assurance that it is not committed to other purposes or other parties. The Draft Final Proposal would apply similar requirements for RA Imports to the CAISO BAA.

## *2. Physical supply tied to energy return obligations*

Sellers of RA Imports can appropriately support those commitments either with resources that they own, or with supply to which they have secured a contractual entitlement. One common source of RA Import supply, including firm energy commitments, to the CAISO BAA is surplus supply from Northwest hydro resources. Multiple hydro entities in the Northwest issue multi-year "slice of system" contracts that entitle the contract holder to a fixed portion of the capacity and energy of the underlying facilities. Marketers often participate in the competitive processes for these yearly and multi-year slice contracts.

More recently, an enhanced version of a hydro slice contract has come into use in the Northwest, under which the contract holder receives both an entitlement to the capacity and energy of the generation facilities, but also an obligation to deliver energy back to the hydro utility. The energy return obligation is generally shaped to reflect the utility's native load obligation, and can exceed the supply entitlement during peak hours. To the extent the marketer fails to provide the required return energy, the hydro entity retains the right to reduce or curtail the marketer's exports from the system.

To be clear, Powerex does not take issue with this enhanced type of slice contract on its own. Hydroelectric systems are often complex and require managing uncertainty and variability of numerous factors; custom arrangements can be an effective way for hydro operators to transfer some of these risks to other parties that can perhaps manage the risks more efficiently.

Powerex is concerned, however, if the supply portion of such an agreement were put forward in support of RA Imports without appropriate deductions for the associated energy return obligations, which in some arrangements can even negate the entire net entitlement to capacity under the contract. In fact, Powerex is aware of at least one such contract where the energy return obligation in the peak hours of the summer months is expected to materially exceed the associated slice capacity. Since the energy obligations to the source BAA have priority over the supply entitlement, RA Imports based on such a contract will once again leave CAISO loads exposed to a marketer's ability and willingness to purchase energy in the short-term bilateral markets (*i.e.*, to deliver on its energy return obligation to the source BAA, and thus prevent exports to the CAISO BAA from being curtailed).

The additional variants of paper capacity strategies described above illustrate the need for a comprehensive set of requirements to ensure that RA Imports are supported by physical capacity that will be available and deliverable to the CAISO BAA, that is reasonably expected to be surplus to the needs of the host BAA, and that has not been and will not be committed under any other transaction. A failure to adopt a comprehensive set of requirements will leave critical gaps in the RA framework. Such gaps will continue to offer opportunities for sellers of RA Imports to maximize their profits by selling RA beyond the quantity of deliverable physical supply they have procured. A robust RA framework must recognize that entities will pursue opportunities to maximize their profits, and must therefore eliminate profitable opportunities that put reliability at risk or are

otherwise contrary to the goals of the RA program. Powerex believes the Draft Final Proposal includes appropriate requirements necessary to reduce or eliminate opportunities for paper capacity RA Imports.

## **II. Transmission Requirements Are Not A Barrier To Competitive Contracting For RA Imports**

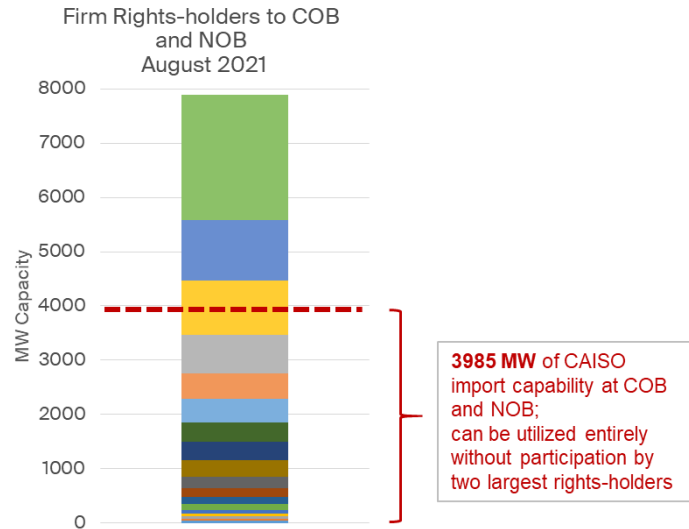
At the January 5-7 public workshop, some stakeholders incorrectly claimed that the Draft Final Proposal's requirements related to transmission service for RA Imports were unnecessary and/or would reduce competition in the supply of potential RA Imports. These concerns are unfounded, and have been fully addressed in multiple prior forums and proceedings. Nevertheless, Powerex believes it is important to provide a brief response to address any remaining misimpressions on this issue.

The first argument raised in the public workshop is that Firm transmission rights to COB or NOB are "concentrated," and that requiring Firm transmission would somehow raise concerns about "the potential for people to exercise market power." As explained by CAISO personnel at the workshop, this claim is flatly untrue, even using conventional concentration metrics.<sup>2</sup> Of course, those metrics are used to assess concentration of an entire *market*, and nothing has been put forward to support defining delivery of energy at one of many potential locations as a market unto itself.

Moreover, the total Firm transmission rights to COB or NOB total nearly 8,000 MW, which is approximately **twice as much** as the nearly 4,000 MW that the CAISO can import at those locations. This is because there are other transmission service providers, in addition to the CAISO, that share in the import capability on the southern segment of COB and NOB. The chart below shows the holdings of Firm transmission to COB and NOB for August 2021, by transmission customer, compared to the CAISO's ability to receive imports at those locations:

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<sup>2</sup> CAISO personnel explained that the Herfindahl-Hirschman Index (HHI) for Long Term Firm rights to COB and NOB was "under 1600."



External rightsholders compiled by Powerex using public OASIS data available at <https://www.oasis.oati.com/westtrans/> and supplemented with data provided in the May 4, 2011 COI Utilization Report by the Transmission Utilization Group available at [https://app.oasis.oati.com/WASN/WASNdocs/COI\\_Utilization\\_Report\\_s.Anners.pdf](https://app.oasis.oati.com/WASN/WASNdocs/COI_Utilization_Report_s.Anners.pdf). CAISO Import Capability data from <http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx>

The practical result is that RA Imports at COB and NOB can fully utilize the CAISO’s entire import capability, even without the participation of the two largest rights-holders.

An additional fact that is regularly ignored by opponents of the CAISO’s Firm transmission requirements is that all of the Firm transmission rights to COB or NOB are subject to the open-access transmission tariffs of the external transmission providers that provide the service. These Firm rights are subject to competition among transmission customers that seek to acquire them. Thousands of MWs of Firm rights come up for renewal each year on each of these paths, presenting an opportunity for transmission customers to compete to acquire or renew these rights.

Any party that is genuinely concerned about whether transmission-related requirements are an impediment to efficient contracting for RA Imports should instead focus on what is the actual limiting factor: the allocation process for the CAISO Maximum Import Capability (MIC). The quantity of CAISO MIC is far more constraining than Firm rights on external systems. Moreover, MIC is not allocated through an open access process, but rather is allocated preferentially to requesting load-serving entities in proportion to their load-ratio share. The entities that are allocated MIC are under no obligation to actually contract for RA Imports at the associated intertie, and there is no release mechanism to make unused MIC available to other entities that *do* wish to contract for RA Imports. Against this backdrop, attempts to conjure up competitiveness concerns opposing the CAISO’s requirements for reliable transmission service on external systems are either misinformed or disingenuous.

The second erroneous claim made at the public workshop is the notion that transmission scheduling priority does not matter, since the amount of power flowing into the CAISO BAA is unaffected. The flaw in this reasoning is that not all energy that flows on a given transmission path is necessarily delivered to the CAISO BAA. For instance, there may be multiple transmission customers seeking to schedule energy across Bonneville’s primary network. Some of these

schedules may be deliveries to a CAISO boundary point (e.g., COB or NOB), but some schedules may be to delivery points in the Northwest (e.g., load in the Portland area). All of these schedules may have a material impact on a flowgate within the Bonneville network, however, and in effect all of these schedules are in competition with one another when the flowgate is at or near its limit. Consistent with OATT principles, in such cases the schedules with lower priority transmission service will be curtailed before schedules with higher-priority transmission service. Requiring higher priority transmission service helps ensure that when upstream constraints are binding, RA Imports to the CAISO will be less likely to be curtailed.

The same principle applies on the Southern Intertie, where holders of Firm transmission rights to COB or NOB can elect to use those rights to deliver energy to BAAs other than the CAISO, including by wheeling through the CAISO BAA. An RA Import that was not supported by Firm transmission rights to COB or NOB would be at risk that Firm rights would be fully used, and hence there would be no Non-Firm service available for purchase. And even if Non-Firm service is made available for purchase, there is no assurance that the RA Import seller would be successful in obtaining the Non-Firm rights. It is only by requiring that RA Imports be delivered on Firm transmission rights to COB and NOB that the CAISO BAA can be assured that external physical resources are actually deliverable to serve load in the CAISO BAA.

It has been Powerex's recommendation that Firm transmission service should be required for RA Imports on the **entire transmission path** from the generation source to the CAISO delivery point. Such a requirement would minimize the risk that RA Imports cannot be delivered to the CAISO grid when needed. The Draft Final Proposal requires Firm service for the *last* transmission segment, but requires at least Non-Firm Monthly (5-NM) priority on all other transmission segments. Powerex does not oppose the Draft Final Proposal as a compromise that mitigates deliverability risk but also provides additional options for suppliers of RA Imports to arrange transmission service. Arguments that these transmission requirements should be further diluted, or eliminated altogether, should be rejected and seen as attempts to enable sellers of RA Imports to increase their profits by avoiding the cost of procuring transmission service necessary to ensure that California ratepayers can actually receive the supply they are contracting for.