

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

Submitted by	Company	Date Submitted
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Powerex appreciates the opportunity to submit comments on CAISO’s October 3, 2019 Resource Adequacy Enhancements Second Revised Straw Proposal (“Second Revised Straw Proposal”). As explained in its prior comments, Powerex strongly supports the CAISO’s efforts to incorporate unit forced outage information in the determination of the Resource Adequacy (“RA”) capacity a resource is eligible to sell as a critical measure to avoid over-stating the available supply of such capacity. The Second Revised Straw Proposal also informed stakeholders of CAISO’s decision to pursue improvements to the procedures used to allocate import capability in a separate, expedited process. Powerex supports this approach to accelerate addressing a significant barrier to contracting for RA capacity from external resources.

In these comments, Powerex focuses on the urgent need for the CAISO to:

1. **Immediately eliminate** Non-Resource Specific System Resources’ eligibility to provide RA; and
2. Review the requirements for external physical resources to provide RA as Resource-Specific System Resources, and **potentially pursue expedited enhancements** to ensure the requirements are both robust and widely workable for a range of differently-situated suppliers of genuine physical capacity commitments.

I. Continuing To Permit Paper Capacity RA Imports Is No Longer Sustainable

As has been recognized by CAISO, DMM, CPUC, and several stakeholders, the current RA framework contains large gaps that enable California LSEs’ RA requirements to be met by import RA contracts that represent paper capacity, which can take the form of:

1. RA contracts where the seller relies on **speculative supply**, particularly its ability to procure energy in the short-term bilateral markets for delivery to the CAISO grid; and
2. RA contracts where the seller notionally complies with the must-offer obligation by **persistently submitting day-ahead offers to minimize or eliminate the likelihood of ever being dispatched** (as this would reveal the seller’s lack of genuine supply). This can include, for example, persistently submitting bids at or near the price cap.

It is currently unknown how much of the current import RA capacity reflects one of the above types of paper capacity, as opposed to being backed by genuine physical resources. The amount of speculative capacity (*i.e.*, in which the seller’s energy deliveries depend on the ability to procure energy in the short-term bilateral markets) may be difficult to quantify, since delivery performance

data on its own does not reveal whether the energy delivered merely reflects spot market purchases or the actual forward commitment of surplus physical supply.

Powerex greatly appreciates the CAISO's and DMM's extensive data analysis related to the second category of paper capacity (*i.e.*, in which the seller bids in the day-ahead market to continuously avoid delivery obligations). In particular, the CAISO's analysis of data from July 2017 to June 2018 included in the Second Revised Straw Proposal identifies three specific Scheduling Coordinators, comprising approximately 450 MW of import RA capacity, that notionally complied with the day-ahead must-off requirement, but had average final day-ahead market awards or self-schedules of only 0% to 6% of this amount over the study period.¹ This analysis complements DMM's prior analysis of bidding behavior by import RA resources during the peak net load hour of two selected days—September 1, 2017 and July 24, 2018—which concluded that “over 500 MW of RA import capacity was bid-in near or at the bid cap of \$1,000/MWh on these days.”²

Regardless of the specific *type* of paper capacity RA sales, both lead to the same outcome: the reliability of the CAISO grid hinges on the availability of surplus energy in the short-term bilateral markets, which is increasingly limited and uncertain. This is the very outcome that RA programs are intended to avoid. Paper capacity should therefore be recognized as inherently incompatible with—and detrimental to—RA.

The harmful consequences from the continued participation of paper capacity in the RA program are numerous and increasingly severe, including:

- **Undermining CAISO grid reliability**, as sellers of paper capacity will be most likely to fail to deliver when the western grid is experiencing tight conditions, which are likely to also be the hours of greatest CAISO need.
- **Economic harm to California ratepayers**, who compensate sellers of paper capacity for Resource Adequacy reliability benefits that they simply do not receive.
- **Economic harm to wholesale market net purchasers in the CAISO BAA**, as wholesale market prices are elevated as the result of both the submission of consistently high offer prices and failures to deliver by sellers of paper capacity.
- **Economic harm to external and internal RA suppliers** willing to commit forward physical capacity, who are “crowded out” of the RA program, including being crowded out of access to limited RA Import Capability.
- **Economic harm to external suppliers of short-term energy**, who end up “backfilling” for the non-delivery of paper capacity RA, yet do not receive any RA revenues.
- **Economic harm to participants across the EIM footprint**, who are extensively “leaned on”, and may also experience EIM price spikes, as a result of the inclusion of paper capacity RA “offer range” in the CAISO BAA's supply in its EIM Resource Sufficiency evaluations.

¹ Second Revised Straw Proposal, at Table 6.

² CAISO DMM, *Import Resource Adequacy*, (September 10, 2018) at 3. Available at: <http://www.caiso.com/Documents/ImportResourceAdequacySpecialReport-Sept102018.pdf>.

Faced with the continuation of these harmful economic and reliability consequences, the CPUC recently took decisive action to try to address this untenable situation.³ Unfortunately, this recent action by the CPUC does not fully address the issue of paper capacity and can be expected to result in other substantive market inefficiencies. Rather than requiring that all import RA be backed by capacity from a specified physical resource, the CPUC decision appears to continue to allow import RA contracts from unspecified sources as long as those contracts self-schedule energy deliveries to the CAISO grid for the full RA quantity in each and every hour covered by the contract. Some of the foreseeable operational challenges and inefficiencies resulting from this “must-flow” requirement were laid out in CAISO’s comments opposing this CPUC action, and include forcing the CAISO to accept energy imports even when that energy is of little (or negative) value to the grid, greatly reducing the flexibility received at CAISO interties, and causing distortions to prices and outcomes in the CAISO markets.

In addition, Powerex believes that the CPUC decision also:

- **Severely hinders the development of an Extended Day-Ahead Market (“EDAM”)**, as self-scheduled energy from unspecified import RA contracts will largely preclude economic transfers between EDAM entities on the major import paths to the CAISO BAA. Import RA is expected to largely utilize all available transfer capability on CAISO’s major interties in the summer season in the years ahead.
- **Undermines the external OATT framework** for reserving and scheduling transmission service to CAISO import delivery locations, as the California LSEs that are allocated RA import capability (through a non-competitive, exclusionary process) will now exclusively decide, through their import RA procurement, which external resources flow energy on *external* transmission paths to the CAISO BAA.
- **Inflates congestion at import locations**, not only causing market inefficiencies but likely causing extensive economic harm to physical suppliers delivering energy to the CAISO BAA, who will now face inflated congestion charges.

Moreover, the CPUC decision is likely to be challenged at FERC and/or in the courts. This will likely result in an extensive, heated, and highly public legal debate for many months (and possibly years) to come, straining relationships and diverting key staff precisely when the CAISO and western stakeholders are seeking to focus their efforts on collaboratively developing an EDAM. The region cannot afford this distraction.

Powerex believes the solution is clear: the CAISO should immediately adopt the same general requirements applied in other organized markets throughout North America and require all import RA to be backed by resource-specific resources.

II. CAISO Should Take Prompt Action To Avoid Protracted Disputes, Strengthen Reliability, And Further Its Broader Objectives

In support of this objective, Powerex urges the CAISO to:

³ On October 10, 2019, the CPUC approved Decision No. D.1910021. Available at: <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M317/K931/317931103.PDF>.

1. Immediately eliminate Tariff provisions that enable RA to be provided by Non-Resource Specific System Resources, thereby affirmatively prohibiting RA imports from unspecified sources; ***and***
2. Review the CAISO Tariff provisions and business practices related to import RA provided from Resource-Specific System Resources, and pursue any enhancements necessary to ensure that all entities able to commit physical capacity to provide import RA face robust but workable requirements for doing so.

It has become imperative that the CAISO take these steps now, as it is no longer sustainable for the CAISO market—in contrast to all other organized markets in North America—to continue to include RA capacity in its RA program that is not from verified physical resources and may not even be “real.” It is also untenable for such unverified supply to continue to be used in the EIM resource sufficiency evaluation for the CAISO BAA, and it would be completely unworkable to include such supply in a day-ahead resource sufficiency evaluation for the CAISO BAA in a multi-state EDAM.

Beyond addressing the numerous problems of the *status quo*, however, strong action now to ensure import RA reflects verified resource-specific capacity is also an opportunity for CAISO to materially advance several key priorities, starting with reliability. Powerex believes that by requiring all import RA to be resource-specific, total import supply to the CAISO BAA will actually *increase*, including on critical days and hours, for two reasons:

1. The requirement will ensure that both contracts for RA and the allocation of limited Import Capability will be aligned with suppliers that are able to commit real surplus physical capacity on a forward basis; and
2. Short-term surplus energy from external sellers will *continue* to be made available in CAISO’s day-ahead and real-time market in response to short-term price signals and economics, but without such short-term surplus energy supply being associated with RA contracts that cost California ratepayers RA payments, and without displacing RA contracts for real forward capacity commitments.

A resource-specific requirement for external resources to provide RA will also enable resource-specific participation by external resources in CAISO’s energy markets. This can lead to substantial improvements in the use of the CAISO’s full network modeling of external supply, supporting more accurate dispatch and pricing; more efficient utilization of available transmission capability; more accurate calculation of losses; the use of resource-specific calculations of default energy bids where applicable; the correct identification of physical supply in EIM and future EDAM resource sufficiency tests; and the correct separation of physical supply from virtual supply under the CAISO’s DAM Enhancements proposal. Requiring all import RA to be resource-specific is therefore highly aligned with CAISO’s broader goals to enhance and expand its markets.

Powerex believes the CAISO has the opportunity to help the region avoid a protracted and contentious industry-wide debate over the CPUC’s “must flow” requirement and instead focus on securing genuine reliability and market efficiency benefits by requiring all RA to be resource-specific.

The CAISO can expect to face resistance from a narrow group of interests; namely, the current sellers of paper capacity RA that will seek to maintain the *status quo*. Such challenges, however, will fly in the face of the widespread best practices of all other organized markets, as well as

against clearly articulated FERC policy and precedent. In 2017, FERC rejected SPP's RA proposal, expressing concerns associated with the SPP's inability to verify capacity in order for resources to serve as capacity resources. Specifically, FERC found that:

... SPP's proposal lacks a requirement that power purchase agreements be backed by verifiable capacity in order to serve as capacity resources. SPP's proposal also lacks a process that would allow SPP to verify whether contracts meet such a requirement. As such, SPP's proposal fails to ensure that LREs that rely on power purchase agreements are providing sufficient capacity to meet their net peak demand plus planning reserve margin on the same basis as LREs that self-supply their own capacity[.]⁴

In the same order, FERC explained that

"[i]n other contexts, the Commission has found that power purchase agreements should be backed by verifiable capacity in order to serve as capacity resources."⁵

More specifically, FERC discussed the same issue in the context of accepting MISO proposed tariff revisions

"In its order on compliance, the Commission stated that it did not consider statements by a market participant to be sufficient to constitute verification, and therefore required that MISO be given a copy of the power purchase agreement to allow it to verify the capacity backing the agreement. The Commission agreed with MISO that it would be reasonable for MISO to reserve the right to request the portions of power purchase agreements that verify the capacity backing the agreement in order for MISO to verify and confirm that the contract complies with the capacity resource standards. The Commission directed MISO to propose such revisions on compliance."⁶

Powerex believes the CAISO can take immediate steps to eliminate import RA from unspecified sources prior to the upcoming summer 2020 season. Powerex strongly believes that all entities that have sold import RA supported by genuine physical resources committed on a forward basis should be able to comply with a workable resource-specific framework. Those suppliers that have only sold paper capacity and cannot meet these requirements should not be counted towards meeting RA needs. Powerex is committed to working with CAISO and stakeholders to ensure that the requirements to verify import RA is backed by physical capacity are robust but also highly workable for a wide range of differently-situated entities.

⁴ *Southwest Power Pool, Inc.*, 160 FERC ¶ 61,033 at P 43 (2017).

⁵ *Id.* at P 41-42 (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 125 FERC ¶ 61,062 at P 32 (2008)).

⁶ *Id.* at P 42.