UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	Docket No. ER20-1075-000

MOTION FOR LEAVE TO ANSWER AND ANSWER OF POWEREX CORP.

Pursuant to Rules 212 and 213 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 213 (2019), Powerex Corp. ("Powerex") moves for leave to answer[1] and submits this answer to the answer of the California Independent System Operator Corp ("CAISO")[2] and to the comments of the CAISO Department of Market Monitoring ("DMM")[3] on the CAISO's proposed revisions to the Capacity Procurement Mechanism ("CPM").[4]

---

[1] Powerex acknowledges that the Commission's rules do not typically allow answers to answers and comments. *See* 18 C.F.R. § 385.213(a)(2). However, the Commission has accepted such answers in the past when they have assisted the Commission in understanding the issues presented, provided additional information for the Commission's decision-making process, and helped ensure a complete and accurate record. *See, e.g.*, *Equitrans, L.P.*, 134 FERC ¶ 61,250 at P 6 (2011); *Cal. Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,023 at P 16 (2010). Powerex requests leave to file this answer because it will meet these criteria.

[2] *Cal. Indep. Sys. Operator Corp.,* Motion for Leave to Submit Answer to Protests and Answers to Protests and Comments of the California Indep. Sys. Operator Corp., Docket No. ER20-1075-000 (filed Apr. 1, 2020).

[3] *Cal. Indep. Sys. Operator Corp.,* Motion to Intervene and Comments of the Dept. of Market Monitoring, Docket No. ER20-1075-000 (filed Mar. 17, 2020).

[4] *Cal. Indep. Sys. Operator Corp.,* Tariff Amendment to Enhance the Capacity Procurement Mechanism, Docket No. ER20-1075-000 (filed Feb. 25, 2020).

I.
ANSWER

Powerex is not protesting the CAISO's proposed tariff amendments in this proceeding, nor is it making a request for specific Commission action in response to CAISO's filing in this docket. Rather, as an interested market participant, Powerex seeks to provide information relevant to the record in this docket for the Commission's consideration. In particular, both Powerex's initial comments and this answer set out information to provide a more complete and accurate record of the circumstances and context specific to the use of the CAISO's CPM as a "measure of last resort" to meet the *system-wide* resource adequacy[5] needs of the CAISO grid, and to distinguish the issues related to CPM in the context of *system-wide resource adequacy needs* from those associated with the CPM's more typical role of meeting *local* resource adequacy needs.

In the remainder of this answer, Powerex addresses the following:

- The use of CAISO's CPM to meet system-wide resource adequacy needs necessitates CAISO successfully competing to acquire voluntary commitments from external resources that face alternative wholesale market opportunities in a rapidly tightening western grid. This is a very different procurement challenge, requiring different compensation considerations, than when the CPM is used to commit, and compensate, existing internal resources to meet a discrete local reliability need.

- The CAISO's assertion that the CPM soft offer cap is at the upper end of the range of market-based System RA prices is not consistent with Powerex's experience in bilateral markets. Powerex has repeatedly observed market bids for monthly System RA for each of the individual

[5] In this answer, "resource adequacy" is used to refer to the broad concept of ensuring the availability of sufficient supply resources to meet peak demand with a high degree of certainty. The terms "RA" and "System RA" refer more narrowly to the products and contracting requirements under California's Resource Adequacy program. Powerex notes that, while the CAISO's CPM is used to procure "resource adequacy" in the broad sense, it does not do so as part of California's Resource Adequacy program.

summer months of 2020 at *more than double* the current CPM soft offer cap.

- The DMM's assertion that the late 2018 CPM for system-wide resource adequacy was "clearly structurally uncompetitive" fails to recognize that external resource participation was, and continues to be, extensively discouraged, and even blocked, by inefficient CPM rules, including the framework used to allocate intertie capability for resource adequacy purposes and the low soft offer cap.

Powerex believes that the facts set forth in this answer make it clear that the CPM framework is likely to be entirely ineffective going forward as a backstop mechanism for ensuring the system-wide resource adequacy needs of the CAISO grid.

A. Powerex Takes No Position On The Design Of The CPM To Meet Local Reliability Needs, But Backstop Procurement Of System Needs Poses A Very Different Challenge

Historically, the primary use of the CPM has been to meet discrete *local* needs in the CAISO grid. The determination of just and reasonable compensation for resources necessary to meet local reliability needs generally occurs in the following context:

- There are typically very few resources (potentially only one) that are capable of meeting the specific local reliability need identified by the CAISO;
- The local resource(s) are, by definition, located within the CAISO balancing authority area ("BAA"), and the development of most of these resources was funded by California ratepayers under long-term contracts; and
- There may often not be a need for new entry of additional local resources. Rather, what is typically needed is a just and reasonable arrangement to compensate an existing local resource for committing to be available during a defined period of time to meet a specific local reliability need.

Powerex reiterates that it takes no position on the level of compensation that is appropriate under these circumstances, including the appropriate soft offer cap level for CPM designations to meet local reliability needs.

Recently, however, the CPM has also been used by the CAISO in a limited number of instances to procure capacity to meet *system-wide* resource adequacy needs. As resources continue to retire in the CAISO BAA, the CPM is likely to be increasingly used for this purpose in the years ahead. Critically, however, procuring resources to meet system-wide needs presents a very different set of considerations than procurement to meet local needs. In particular:

- System-wide resource adequacy needs can be met not only by resources located anywhere within the CAISO BAA, but also by external resources located in other BAAs across the Western Interconnection;
- The development of most external resources was not funded by California ratepayers;
- External resource participation in the CAISO CPM is entirely voluntary;
- Unlike internal resources, external resources generally have multiple alternative opportunities to commit their supply to other entities outside of the CAISO BAA, both through forward wholesale market transactions as well as through transactions in the various short-term markets in the west; and
- There is ample evidence of the need to invest in new resources to increase system-wide supply, as conditions are rapidly tightening in the CAISO BAA and across the Western Interconnection.

While the CPM for local resource adequacy may be viewed as providing just and reasonable compensation to a specific subset of existing California resources that the CAISO determines are necessary to continue to meet local reliability needs, the CPM for system-wide resource adequacy needs to be designed to enable CAISO to *compete* to attract limited, voluntary external supply in a rapidly tightening regional grid. Powerex believes it is vital for the Commission

and all stakeholders to appreciate this distinction, and to consider that the CPM design that is most appropriate in the context of meeting local resource adequacy needs may be very different from the design that is appropriate in the context of meeting system-wide resource adequacy needs.

B. The CPM Soft Offer Cap Does Not Enable The CAISO To Compete For External Supply Commitments To Backstop System Needs

In its answer, the CAISO states that "CPM is merely a backstop procurement mechanism, and is not intended to incent new generation[.]"[6] CAISO goes on to say that the CPM "merely procures needed capacity from existing units," and it is thus inappropriate for the CPM to provide compensation based on the cost of new entry.[7] Powerex does not necessarily disagree with this characterization or conclusion *in the context of meeting local resource adequacy needs that can be fully met with existing California resources* where compensation based on going-forward fixed costs may, arguably, be appropriate.

But Powerex believes that the CAISO's statements are not applicable to the backstop procurement of resources to meet system-wide resource adequacy needs, where it is widely acknowledged that existing capacity is *not* sufficient, and where new entry *is* necessary.[8] The CAISO's statements also do not appear to recognize that even procurement of capacity from existing external resources reflects procurement of capacity from resources that have most typically been

[6] CAISO Answer at 74.

[7] *Id.*

[8] *See, e.g.,* CAISO Briefing on Post 2020 Grid Operational Outlook (September 18, 2019) (identifying a "potential resource shortage" of 2,300 MW in 2020, increasing to 4,700 MW by 2022), *available at:* http://www.caiso.com/Documents/Briefing-Post-2020-GridOperationalOutlook-Presentation-Sep2019.pdf.

funded by ratepayers *in other regions*, and occurs in the context of a regional market where other purchasers are also competing to secure the same capacity. In a well-functioning and competitive forward market for capacity, all suppliers—including existing resources and new resources—should appropriately receive consistent compensation that reflects the marginal value of the committed supply. As the western grid tightens, and new resource additions are needed, market fundamentals should lead all parties to expect that this marginal value of system-wide capacity will efficiently rise toward the cost of new entry.

The CAISO appears to recognize the importance of enabling the CPM to provide compensation consistent with market conditions.[9] The CAISO also states that the CPM soft offer cap is "at the higher end of bilateral RA prices."[10] Powerex disagrees with CAISO's assessment of current bilateral RA prices, however, as it appears to be based on information compiled by the California Public Utilities Commission ("CPUC") on observed bilateral RA prices from 2018.[11] Unfortunately, such data does not reflect current and evolving market conditions, including extensive past and planned generation retirements in both California and external regions in the West. In addition, the CPUC data that CAISO relies upon appears to reflect prices under **all** reported RA contracts for 2018 through 2022. But the average price of an RA contract spanning a season, an entire year, or

[9] CAISO Answer at 61 (stating that the CPM soft offer cap "provides a meaningful opportunity for resources to recover their costs and allows room for prices to reasonably fluctuate with changing market conditions and capacity prices").

[10] *Id.*

[11] *Id.* at 54, n.125 (citing data on RA prices from the CPUC's 2018 Annual Resource Adequacy Report).

multiple years is not relevant to the price applicable to an RA contract (or a CPM award) that may be for as short as a single month in duration and/or may cover only the peak month(s) of the year.

Moreover, CAISO's view that the CPM soft offer cap is at the "higher end of bilateral RA prices" is contrary to what Powerex has recently observed in the wholesale markets for bilateral System RA products, particularly for the individual summer months of 2020 and beyond. As an active participant in wholesale markets in the West, including in the markets for the forward commitment of capacity and/or firm energy, Powerex routinely receives quotes from brokers seeking to buy and/or sell System RA. In the last several months, brokers have repeatedly reported bid prices to purchase monthly System RA in each of the peak months of summer 2020 (*i.e.*, July, August and September 2020) that are ***more than double*** the CPM soft offer cap. The fact that the CPM soft offer cap may no longer be "at the higher end of RA prices" undercuts numerous statements in the CAISO Answer regarding the effectiveness of the current and proposed CPM soft offer cap, and whether load-serving entities ("LSE") may have an incentive to "lean" on the CPM (with costs generally capped at the CPM soft offer cap) rather than procuring sufficient System RA to avoid a deficiency.[12]

[12] *See, e.g., id.* at 45 ("the CPM soft offer cap is set at the higher end of RA prices. The Commission found that this should not cause LSEs to forego bilateral procurement and instead lean on CPM"); *id*. at 54 ("the existing CPM soft offer cap is both within the price ranges of existing bilateral RA contracts and at the higher end of RA contracts to discourage LSEs leaning on CPM").

The CAISO's Answer also asserts there is no evidence that the low CPM soft offer cap is resulting in LSEs electing to fail to meet their RA requirements.[13] In fact, however, recent reports from the CPUC highlight that tight market conditions have led to RA failures by multiple California LSEs:

> *Overall, the data provided in this report suggest that the RA market remains tight.*
>
> *In 2019, 11 LSEs had year ahead local deficiencies,* ***six had year ahead system deficiencies****, and five had year ahead flexible deficiencies, and* ***many of these deficiencies persisted through the year in month ahead filings****. In addition, some LSEs reported being unable to identify available capacity at any price. September, which was the forecasted peak load month of 2019, proved to be the most challenging. Five LSEs had September 2019 deficiencies totaling 847.02 MW which* ***resulted in a cumulative deficiency for CPUC jurisdictional LSEs for the first time****.*
>
> ***This trend continued in the 2020 year ahead filings****, in which, preliminarily, 20 LSEs had year ahead local deficiencies,* ***five had year ahead system deficiencies,*** *and four had year ahead flexible deficiencies. These totals may change once LSEs have had the opportunity to cure deficiencies.*[14]

Powerex anticipates that both the current and proposed CPM soft offer cap are likely to be well below the competitive bilateral market price of procuring System RA from external resources. This can be expected to undermine the ability, or potentially the willingness, of California LSEs to procure sufficient System RA to avoid a deficiency, which in turn will increase the need for CAISO to use its CPM as a backstop mechanism to meet system-wide resource adequacy needs. The below-market CPM soft offer cap, however, will also render the CPM largely

---

[13] *Id.* at 74.

[14] *Cal. Pub. Util. Comm'n,* The State of The Resource Adequacy Market – Revised: October-December 2019 Month Ahead & 2020 Year-Ahead Filing Information at 40 (emphasis added) (Jan. 13, 2020)*, available at:* https://www.cpuc.ca.gov/RA/*.*

ineffective in competing to secure the voluntary commitment of external resources for this purpose.

C. CPM Rules—And Not Structural "Uncompetitiveness"—Are A Barrier To External Resource Participation In The CPM

In its comments, the DMM claims that the CAISO should consider reducing the CPM soft offer cap due to the purported "uncompetitiveness" of recent CPM procurement processes.[15] In support, the DMM cites information related to *local* capacity procurement, and points only to a single fact regarding CAISO's procurement of *system-wide* resource adequacy.[16] Specifically, DMM points to the limited participation in CAISO's competitive solicitation process ("CSP") in late 2018 for system-wide resource adequacy, and concludes that the 2018 data reflects a market that is "clearly structurally uncompetitive."[17] The DMM then suggests that the purported lack of competition justifies further reducing the compensation available to suppliers that receive a CPM designation, including for system-wide resource adequacy.[18]

DMM's arguments are misplaced. The limited participation in the CAISO's 2018 CPM process did not reflect a lack of potential supply. The potential suppliers of system-wide resource adequacy to the CAISO under its CPM framework include not only all internal generation resources that are not already committed under RA contracts (and/or other forward capacity obligations) but also surplus capacity from

[15] DMM Comments at 14.

[16] *Id.* at 14-16.

[17] *Id.* at 18.

[18] *Id.* at 14 (stating that "[t]he level of the annual CPM soft offer cap deserves scrutiny due to the uncompetitiveness of local capacity markets and CPM designations").

external resources located throughout the Western Interconnection. Based on Powerex's familiarity with market conditions for the fall of 2018, it believes there were likely *thousands of MWs of potential external surplus capacity, from a broad array of potential suppliers,* that could have been committed to the CAISO BAA, as well as the firm transmission service necessary to reliably deliver that capacity to the CAISO.

The existence of this surplus physical capacity clearly did not translate into a large number of offers from external suppliers in the CAISO's CPM process in late 2018, however. In Powerex's view, the lack of offers reflected the onerous CPM rules and requirements, together with a highly compressed procurement timeframe, that collectively created enormous barriers to that potential supply actually participating in the CPM process. To understand why this occurred, it is necessary to consider the multiple aspects of the existing CPM framework that impede both the ability, and willingness, of external suppliers to offer to provide forward capacity commitments to the CAISO under the current CPM framework.

The most significant structural barrier is the requirement that external resources must already possess an allocation of CAISO resource adequacy import capability ("IC") at the time that they submit an offer into the CSP.[19] While Powerex does not seek to use this docket to advocate for specific changes to the CAISO's IC allocation process, it notes that the CAISO's IC allocation process has several

[19] CAISO Tariff, Section 43A.4.1.2 (stating that an external resource's offer into the CSP is limited by the allocated import capability held by the resource).

features that effectively "strand" import capability, preventing robust participation in the CSP by external resources.

At present, CAISO IC is initially allocated on a year ahead basis through a complex 13-step process set forth in the CAISO tariff, with California LSEs generally having priority access to a CAISO IC allocation, prior to it being made available to other entities.[20] Importantly, California LSEs are able to request and receive an allocation of IC from the CAISO through this year-ahead allocation process, without demonstrating that they have any pending forward supply contract that would utilize that allocation. LSEs also are not under any obligation to use their allocated IC, or to make unused IC available to other LSEs and/or external RA suppliers. And since LSEs do not incur any incremental charge for the IC allocation they receive, there is no reason to *not* request such an allocation; it is effectively a "free option."

As a result, CAISO IC has largely been tied up on a year-ahead basis and held by LSEs even if it is not used to support an import capacity contract. For example, data made available about the availability of IC in 2018 shows that:

- CAISO fully allocated IC at its three largest interties (*i.e.,* COB, NOB and Palo Verde);[21]

[20] There are limited exceptions to the allocation of CAISO IC exclusively to California LSEs. First, to the extent there is remaining unallocated IC after California LSEs have requested and received their allocations, this residual IC is made available more broadly, including to non-LSEs. Second, entities that have transmission ownership rights on the CAISO grid, which may or may not be California LSEs, may receive IC associated with those transmission ownership rights.

[21] *See* Cal. Indep. Sys. Operator Corp., Step 12: Notification of Unassigned Import Capability (showing no unassigned import capability at COB, NOB or Palo Verde), *available at*:

- The majority of the IC at these interties was allocated to the two largest California LSEs (*i.e.*, Pacific Gas & Electric ("PG&E") and Southern California Edison ("SCE"));[22] and

- PG&E and SCE did not use all of their IC at these interties in their respective annual RA showings for late 2018.[23]

Data now being reported by the CPUC for 2019 and 2020 confirms that a significant quantity of IC continues to go unused year after year.[24]

With the vast majority of CAISO's available IC at the major interties already allocated on a year-ahead basis to California LSEs, and with no CAISO Tariff provisions requiring unused CAISO IC to be released to other entities (or to the CAISO for use in connection with the CPM), external suppliers seeking to participate in the late 2018 CSP would have faced a very significant hurdle to meeting the CAISO's requirement to secure sufficient IC to support their offer. In order to be eligible to participate in the CSP, an external supplier would have

---

http://www.caiso.com/Documents/2018Step12CAISONotification_UnassignedCapability.pdf.

[22] *See* Cal. Indep. Sys. Operator Corp., 2018 Holders of Import Capability (showing PG&E and SCE received a combined 1,555 MW of CAISO import capability at COB, 1,042 MW at NOB, and 2,158 MW at Palo Verde), *available at*: http://www.caiso.com/Documents/2018HoldersImportCapability.pdf.

[23] *See* Cal. Indep. Sys. Operator Corp., 2018 Import Capability Used on Annual Resource Adequacy Plans (reporting that neither SCE nor PG&E fully used their respective import capability allocations at COB, NOB, or Palo Verde in their annual RA showings for October, November or December 2018), *available at*: http://www.caiso.com/Documents/2018ImportCapabilityUsedonAnnualResourceAdequacyPlans.pdf.

[24] *See, e.g., Cal. Pub. Util. Comm'n*, The State of the Resource Adequacy Market at 19 (Sept. 2019) (showing that between 25% and 75% of IC went unused in every month of 2019); *Cal. Pub. Util. Comm'n,* The State of The Resource Adequacy Market – Revised: October-December 2019 Month Ahead & 2020 Year-Ahead Filing Information at 39 (Jan. 13, 2020) (showing significant unused IC allocations for peak months of 2020).

needed to take the following steps immediately following CAISO's announcement of the 2018 CSP:

1. Determine the quantity and CAISO intertie scheduling point of the CPM offer they wished to submit;

2. Contact California LSEs to identify which entity (or entities) had received an allocation of IC at the desired intertie, but had elected not to use it;

3. Attempt to negotiate a bilateral purchase of the desired IC from the current holder(s) (with CAISO data indicating the price of similar bilateral transactions had been as high as $4.25/kW-mo.[25]); and

4. Incur the cost of this bilateral purchase of IC, despite having no assurance that the CAISO would actually procure any CPM capacity,[26] let alone procure from the participant's specific offer.

The requirement that a supplier possess IC simply to submit an offer into the CAISO's CSP therefore presents a very significant barrier to participation for suppliers with external surplus capacity, as it requires a participant to incur significant up-front costs without any way of knowing whether they will be awarded a CPM designation.[27] Moreover, the potential benefit of incurring these up-front

[25] *See* Cal. Indep. Sys. Operator Corp., 2018 Additional Bi-Lateral Transfers of Import Capability, *available* at: http://www.caiso.com/Documents/2018AdditionalBi-LateralTransfersofImportCapability.pdf.

[26] *See Cal. Indep. Sys. Operator Corp.,* Intent to Designate CPM Capacity Pursuant to CPM Significant Event at 9 (Aug. 2, 2018) (indicating that CAISO was considering over 1,400 MW of capacity), *available at*: http://www.caiso.com/Documents/Presentation-CapacityProcurementMechanismSignificantEvent.pdf; *Cal. Indep. Sys. Operator Corp.,* Market Notice, Capacity Procurement Mechanism Designation for 9/1/18 (Aug. 29, 2018) (indicating that CAISO had designated 624 MW), *available at*: http://www.caiso.com/Documents/CapacityProcurementMechanismDesignation-090118.html.

[27] Powerex further notes that the initial notification that CAISO would conduct a CSP for September 2018 appears to have occurred *after* the deadline for bilateral transfers of IC allocation for that month. It thus appears that it was *impossible* for an external supplier that was not already in possession of IC to even submit an offer in the CPM for September 2018.

costs is limited, as the potential revenue earned even by a successful bidder is capped by the CPM soft offer cap.

The second major hurdle to external resource participation in the CSP is the compensation provided to sellers that receive a CPM designation. As Powerex explained in its initial comments, the existing CPM soft offer cap limits compensation under the CPM framework to just 8.33% of the annual going forward costs of a hypothetical thermal resource, for each month of CPM capacity provided, which is *far* below the competitive, efficient price for forward capacity commitments under prevailing conditions in the west (where new capacity additions are needed in the near term). In addition, the compensation available to suppliers that receive a CPM designation is further reduced by the CPM's reliance on the procurement of capacity one month at a time, and with limited lead time, which effectively means that suppliers that are selected to provide backstop capacity may receive only a single month's worth of CPM capacity revenue. Given these aspects of the existing CPM framework, it is reasonable to expect external sellers will forego participation in the CSP any time they anticipate more attractive commercial opportunities will be available in western bilateral forward and/or spot wholesale electricity markets.

In short, further decreasing the CPM soft offer cap, as the DMM appears to suggest, *is the exact opposite* of the action that needs to be considered if the goal is to increase external supplier participation in the CSP. Treating the lack of robust external supply offers in the 2018 CSP for system-wide resource adequacy as an opportunity to implement even tighter pricing controls—rather than recognizing

and addressing the sizeable barriers to external supply participation—is contrary to sound price formation principles and completely counterproductive to achieving the CAISO's overarching goals. Further ratcheting down the CPM soft offer cap would serve only to artificially suppress compensation to any internal or external resources that *do* participate in the CPM to well below competitive, efficient price levels for forward capacity commitments. Instead, the CAISO should work with stakeholders to eliminate existing barriers to participation and modify the CPM framework to successfully attract the voluntary participation of external resources to meet system-wide resource adequacy needs.

II.
CONCLUSION

Wherefore, for the foregoing reasons, Powerex requests that the Commission issue an order consistent with its comments and answer in this proceeding.

Respectfully submitted,

Stephen J. Hug
Tracey L. Bradley
Bracewell LLP
2001 M Street NW, Suite 900
Washington, D.C. 20036
(202) 828-5800
stephen.hug@bracewell.com
tracey.bradley@bracewell.com

/s/ Deanna E. King
Deanna E. King
Bracewell LLP
111 Congress Avenue
Suite 2300
Austin, Texas 78701
(512) 494-3612
deanna.king@bracewell.com

For Powerex Corp.

April 6, 2020

CERTIFICATE OF SERVICE

Pursuant to Rule 2010 of the Commission's Rules of Practice and Procedure, I hereby certify that I have this day served a copy of the foregoing on all persons designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, D.C. this 6th day of April, 2020.

/s/ Stephen J. Hug
Stephen J. Hug

Document Content(s)