Comments of Powerex Corp. on
Regional Resource Adequacy Straw Proposal

Submitted by	Company	Date Submitted
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Powerex appreciates the opportunity to submit comments on CAISO's February 24, 2016 Regional Resource Adequacy ("RA") Straw Proposal ("Straw Proposal"). Powerex believes that the primary objectives of any RA program should be to ensure that sufficient qualifying resources are procured to meet reliability needs, and that this procurement occur in an efficient, competitive, and non-discriminatory manner.

In its prior comments, Powerex noted that other organized markets in the U.S. pursue these objectives through a centralized forward capacity market. Such an approach could conceivably be effective for meeting the RA needs of the entities that elect to join an expanded RTO in the west, with resources located outside of the RTO footprint able to offer those resources on a strictly voluntary basis. There is an inherent tension, however, between a formal, FERC-regulated centralized capacity market and the desire of state regulatory agencies to retain oversight of the procurement activities of the load-serving entities that they regulate. Powerex fully respects the desire for continued local oversight, and has frequently stressed the importance of CAISO embracing a market design that truly "works" for the entities they hope will join and/or participate in its markets. Powerex therefore recognizes that a centralized capacity market is highly unlikely to have broad acceptance at this time, particularly given the CAISO's current governance framework.

Even if California's existing RA framework is merely extended to the footprint of the expanded RTO, competitive, efficient and non-discriminatory procurement of RA (and Flexible RA) remains of paramount importance, however. Achieving these objectives through a bilateral procurement framework will require designing a program that provides a high level of transparency and hence supports competition between the resources that can provide RA services. For instance, the RA program should ensure that external resources can compete with internal resources and that new resources are only added when they present a lower cost option than procuring RA from existing resources. Moreover, where the addition of new resources is warranted, the program should ensure there is robust competition among potential new resource alternatives. In this manner, a well-structured bilateral framework could achieve efficient, least-cost procurement outcomes similar to a centralized capacity market, without the loss of local oversight and control.

Powerex believes that the effectiveness of the current bilateral RA framework can be significantly improved through two relatively limited changes. First, the Maximum Import Capability ("MIC") allocation mechanism should be improved, as it is currently ineffective, and creates an artificial bottleneck to imports that impedes the efficient procurement of competitive

RA resources. Rather than rationing intertie capability if and when it is oversubscribed, the MIC allocation is having the opposite effect and resulting in the chronic under-utilization of intertie capacity. Second, there is limited transparency into the RA contracting decisions of load-serving entities ("LSE") under the existing framework. Greater transparency would support more efficient procurement and provide a credible long-term price signals to support investment where and when it is most valuable.

Ensuring Economic RA Imports are not Artificially Limited by CAISO's MIC Allocation

Under the existing RA framework, the MIC mechanism is intended to ensure deliverability of RA imports by limiting the total RA contracts on each intertie to no more than the intertie's expected import transfer capability. This is achieved by effectively allocating MIC on each intertie to LSEs through a 13-step process, largely based on an LSE's load-ratio share. That is, LSEs with larger loads are able to receive higher MIC allocations. Importantly, the MIC allocation does not confer any physical or financial transmission rights; it simply acts to limit the quantity of import RA that each LSE may claim toward satisfying its RA obligations.

Unfortunately, there is considerable evidence from the procurement of generic system RA that the current MIC allocation process is not working efficiently and hinders the cost-effective procurement of RA from external resources.

In its 2013-2014 report on the RA program, the California Public Utilities Commission ("CPUC") notes that only between 5 to 10% of total committed RA capacity has been from imports.[1] This is consistent with earlier CPUC reports, and also with analysis conducted by the Department of Market Monitoring.[2] In its report for 2012, CPUC compared the quantity of import RA capacity to the allocation of MIC, and concluded that "CPUC jurisdictional LSEs used between nine and 56 percent of their monthly import allocations during the summer of 2012."[3] This low level of utilization of imports would be expected if external RA resources were more expensive than in-state capacity. But in Powerex's experience, intertie RA contracts are typically priced *below* the CPUC's reported average price of system-wide RA contracts procured from in-state resources.[4] This strongly suggests that the MIC allocations are significantly under-utilized despite the comparatively low price of import RA.

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[1] Cal. Pub. Util. Comm'n, The 2013-2014 Resource Adequacy Report at 17 (Aug. 2015), *available at* http://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6325.

[2] *See, e.g.,* Cal. Indep. Sys. Operator Corp. Dept. of Market Monitoring, 2014 Annual Report on Market Issues & Performance at 187 (June 2015) ("Utilities used imports to meet around 3,800 MW, or about 8 percent, of the resource adequacy requirements during the 210 highest load hours"), *available at* http://www.caiso.com/Documents/2014AnnualReport_MarketIssues_Performance.pdf.

[3] Cal. Pub. Util. Comm'n, 2012 Resource Adequacy Report at 34 (Apr. 2014), *available at* http://www.cpuc.ca.gov/NR/rdonlyres/94E0D083-C122-4C43-A2D2-B122D7D48DDD/0/2012RAReportFinal.pdf.

[4] As discussed more fully in the following section, it would be very useful for the CPUC to differentiate between system RA procured from internal as opposed to intertie resources in its annual analyses of the RA program.

Powerex's experience and the CPUC data indicate that the MIC allocation process is a serious impediment to California LSEs procuring RA from the lowest cost resources. Simply put, some LSEs that wish to purchase import RA are unable to obtain sufficient MIC capacity, while other LSEs that have received allocations of MIC capacity do not fully utilize that allocation to support RA procurement from imported resources. There is a clear inefficiency in the allocation of MIC capacity, and it has resulted in significant and recurring "stranding" of import capability.

While Powerex has significant concerns that the MIC allocation methodology may impair least-cost procurement of RA, it is cognizant that CAISO does not seek a wholesale redesign of that framework at the present time. Powerex believes that the stranding of capacity can be reduced through incorporating a simple, but highly important, safeguard into the existing MIC allocation methodology. This safeguard would reduce the allocation of MIC capacity to LSEs that did not utilize their allocation (or transfer their unused allocation to other entities) in the prior year. Unallocated MIC capacity could instead be made available to entities that do seek to procure import RA (or Flexible RA, if the FRAC-MOO 2 initiative is implemented), on a first-come, first-served basis. Powerex provides additional detail, including proposed revisions to the pertinent CAISO Tariff provision, in Appendix A to these comments.

Greater Transparency Is Needed to Ensure Competitive, Non-Discriminatory RA Contracting

Under CAISO's existing RA framework, each LSE is required to secure sufficient capacity—either through ownership or a bilateral agreement with a supplier—to meet its share of local, system, and flexible RA requirements. Because the actual selection, negotiation, and execution of RA contracts is generally left to the subjective judgment of each individual LSE, there is no assurance that such a framework will lead to competitive and least-cost outcomes. Assessing the performance of a bilateral RA program requires publication of objective information and analysis regarding actual procurement decisions of LSEs. The public information provided under the current RA program falls short of this objective. For instance, the last CPUC report on the RA program is for 2013-2014.[5] Furthermore, the analysis in that report is based on a data set representing just 25% of the RA requirements, which the report acknowledges is "far from complete."[6] Notably, the CPUC analysis did not include—and did not request—any information on RA procured from external resources.[7]

The limited information that is available on RA procurement decisions raises questions about the competitiveness of the procurement process. For instance, the CPUC report for 2013-2014 shows that, even though the weighted *average* contract price for "CAISO System RA Capacity" was $2.86/kW-month, LSEs paid as little as $0.11/kW-month under some contracts and as much as $18.99/kW-month under other contracts.[8] Additional detail in the CPUC analysis—including disaggregation between monthly and annual contracts, and between internal and external resources—and data that is truly comprehensive of all procurement decisions are

[5] CPUC's reports on the RA program are available at http://www.cpuc.ca.gov/General.aspx?id=6307

[6] CPUC 2013-2014 Resource Adequacy Report at 23.

[7] *Id.* at 22.

[8] CPUC 2013-2014 Resource Adequacy Report at 24, Tbl. 11.

necessary to provide the transparency required to support a competitive RA procurement environment. Increased transparency will allow regulators, consumer representatives, and other stakeholders to assess whether RA procurement is, indeed, competitive. The CAISO's Market Surveillance Committee also recently noted "the lack of transparency in California's RA markets[.]"[9] Increased transparency will also provide potential sellers of RA capacity with more robust price signals to which they can respond, directly enhancing competition in providing this service.

Powerex therefore recommends that CAISO work with the CPUC and the respective state regulatory agencies that would oversee procurement by LSEs subject to any regional RA framework to provide for timely and comprehensive publicly-available reporting on the market pricing of various RA products. The reporting should be sufficiently granular to differentiate

- by product type (*e.g.,* local vs. system RA, Flexible RA … *etc.*),
- by contract duration,
- between new and existing resources, and
- between internal and external resources.

The latter is especially important to permit interested parties to gauge whether the MIC allocation, discussed above, may be artificially limiting procurement of lower cost capacity and flexible capacity resources from outside of the CAISO RTO footprint.

[9] CAISO Market Surveillance Committee, Final Opinion on Commitment Cost Bidding Improvements, at 4, *available at* http://www.caiso.com/Documents/MSC_Opinion_CommittmentCostBiddingImprovements-Mar10_2016.pdf.

Appendix A

Proposed MIC Allocation Safeguard

Powerex suggests that the allocation of MIC continue to be based on each LSE's load ratio share, according to the current 13-step process, but only if the LSE actually used its allocation (within a specified threshold) in the prior year. If an LSE used substantially less than its allocation in the prior compliance year, then its current year allocation would be based on its prior-year actual use. More specifically:

- Each LSE's MIC allocation on an over-requested intertie would be limited by its prior-year use of import capacity on that intertie if, in the prior compliance year, it:
    - Used less than 90% on average, in the peak load hour each day, in 6 or more months of its annual allocated MIC (net of bilateral transfers), for RA or Flexible RA contracts of any duration; or
    - Used less than 80% on average, in the peak load hour each day, in 6 or more months of its annual allocated MIC (net of bilateral transfers) for year-ahead and month-ahead RA or Flexible RA.
- These limitations would *not* apply if the LSE could demonstrate that it has executed annual RA or Flexible RA contracts on the relevant intertie requiring a higher level of MIC than was used in the previous year; in this case annual MIC would be limited to the demonstrated volume of contracts in 6 or more months
- Any MIC capacity that is unallocated as a result of applying the above limitations would be available to other LSEs under the initial Intertie assignment during Step 9 of the allocation process. In addition, each LSE would still be able to request MIC capacity on the relevant intertie during any secondary allocation under Step 11 or Step 13.

Powerex believes that additional language could be added to Step 9 of the MIC Allocation (CAISO Tariff Section 40.4.6.2.1) as highlighted in bold below:

> Step 9: Initial Scheduling Coordinator Request to Assign Remaining Import Capability by Intertie:
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> In accordance with the schedule set forth in the Business Practice Manual, the Scheduling Coordinator for each Load Serving Entity or Market Participant shall notify the CAISO of its request to assign its post-trading Remaining Import Capability on a MW basis per available Intertie. Total requests for assignment of Remaining Import Capability by a Scheduling Coordinator cannot exceed the sum of the post-traded Remaining Import Capability of its Load Serving Entities. The CAISO will honor the requests to the extent an Intertie has not been over requested. If an Intertie is over requested, the requests for Remaining Import Capability on that Intertie will be assigned based on each Load Serving Entity's Import Capability Load Share Ratio in the same manner as set forth in Step 4.

However, if during the previous compliance year and on the relevant intertie, an LSE either:

A. Used less than an average of 90% of its assigned Import Capability, net of bilateral transfers, in the peak load hour each day, during six or more months for deliveries of RA or Flexible RA contracts of any duration, or

B. **Used less than an average of 80% of its assigned Import Capability, net of bilateral transfers, in the peak load hour each day, during six or more months for deliveries of year-ahead and month-ahead RA or Flexible RA contracts,**

then the total request assigned to the LSE according to the methodology set forth in Step 4 shall not exceed the LSE's average usage (as measured during the six months of greatest usage) unless the LSE can demonstrate evidence of executed RA contracts on the relevant Intertie that exceed such quantity over six or more months. If the LSE provides such documentation, then the total request assigned to the LSE shall not exceed the quantity of such executed contracts.

A Market Participant without an Import Capability Load Share will be assigned the Import Capability Load Share equal to the average Import Capability Load Share of those Load Serving Entities from which it received transfers of Remaining Import Capability.

The above is only one possible approach, and Powerex would welcome the opportunity to discuss alternative safeguards with CAISO and other stakeholders. Ultimately, however, it must be recognized that the current approach has resulted in an allocation of MIC capacity to entities that may often significantly under-utilize that capacity to procure RA from external resources. In order to reduce the amount of inefficient "stranding" of intertie capacity for forward RA procurement, it will be necessary to reduce the amount of MIC capacity that is simply allocated to LSEs as "free options" to *potentially* support import RA contracts, and to increase the amount of MIC capacity that is available to entities actually intending to utilize it for yearly and monthly RA import contracts.