Powerex appreciates the opportunity to submit comments on CAISO’s November 20, 2020 workshop respecting penalty prices and scheduling priorities in the CAISO markets. At the workshop, CAISO described pricing and scheduling changes that it has made through its business practice manuals in response to the performance of the CAISO markets during the summer heat wave, including the priority and curtailment of export schedules. Following the workshop, CAISO has solicited comments on what topics related to pricing and scheduling priorities should be discussed through subsequent stakeholder meetings.

Powerex believes that the events of this summer have upended long-established norms and practices in the industry regarding the treatment of firm supply. For over two decades, western load-serving entities (“LSEs”) have counted upon firm supply, including firm exports from other balancing authority areas (“BAAs”), as a reliable source of energy and/or capacity that could be counted upon to be available to maintain reliability. Regardless of whether the sale was sourced from an independent power producer, marketer, vertically-integrated utility, or any other market participant, it has generally been understood that a firm sale transaction should be backed by the physical capacity and operating reserves necessary to ensure that the supplier could deliver energy in accordance with its commitment. In addition, while such transactions have been subject to periodic curtailment due to transmission de-rates or other such limitations, it has been long established practice that the source BAA would not curtail such transactions due to supply limitations—in recognition of the importance of firm supply transactions to maintaining the reliability of the grid.

This past summer, however, the CAISO BAA departed from these long-standing practices. Due to supply shortages arising from well-documented gaps in California’s resource adequacy (“RA”) framework, and after being forced to shed firm load for two consecutive days, CAISO operators curtailed firm export schedules to the Southwest—a region that was also experiencing high prices and equally compelling reliability needs—in order to avoid further curtailments of CAISO load. During this period, CAISO also was importing significant quantities of energy from the Northwest. By curtailing firm exports, CAISO effectively treated all energy that was being imported from the Northwest as if it was available to serve California load ahead of load in other BAAs.

Powerex believes that CAISO’s decision to curtail firm exports to a neighboring region—particularly during tight system conditions—has profoundly altered the view of the reliability of supply sourced from the CAISO markets. Since the events of this summer, firm supply sourced from the CAISO BAA has consistently traded at forward market prices that are well below forward
market prices in the Southwest; with limited, if any, expected transmission constraints from California to the Southwest region, this trend suggests that purchasers are increasingly viewing contracts backed by supply from the CAISO BAA as inherently “non-firm” contracts (i.e., contracts that are subject to interruption and cannot be counted upon to be available, particularly during tight system conditions when supply is most needed). In addition, LSEs in the Southwest and throughout the region are increasingly unwilling to enter into forward supply arrangements involving energy that may be sourced in the CAISO BAA. In short, purchasers across the west—whether formally or informally—are now broadly treating all energy sourced in the CAISO BAA as non-firm supply.

In the wake of these events, it is crucial that CAISO convene a stakeholder proceeding to examine the issue of curtailment of firm exports—and the situations in which doing so is appropriate. Ideally, CAISO would never be in a position where it is faced with the choice of whether to curtail its own firm load or curtail firm exports to neighboring regions. Instead, California’s RA program—as well as those of other regions—would ensure that all RA contracts are backed by a forward commitment of real physical supply that can be counted upon to be available and has not been committed to meet the needs of any other region. Implementation of the reforms that CAISO is advocating for through its RA Enhancement proceeding as well as ongoing California Public Utilities Commission proceedings would represent an important step towards that objective. The fact remains, however, that until the substantive gaps in the existing California RA program have been addressed, it is likely that CAISO may find itself in a position where it is once again faced with the choice of whether to curtail firm load or firm exports.

Powerex believes that restoring confidence in the CAISO markets will require CAISO to take a carefully considered, more nuanced approach going forward. Importantly, it is not clear that CAISO should have priority access to all energy imported into the CAISO BAA. To the contrary, in Powerex’s view, the priority will necessarily depend on the nature of the imports at issue, including whether the imports are associated with a California RA obligation.

To be clear, in cases where a California LSE has competed to obtain a forward commitment of real physical supply from identifiable resources and has verified that the supply has not also been committed to meet the reliability needs of another region (i.e., that its purchase is not for paper capacity and/or supply that has been “double sold”), then CAISO should have access to the energy associated with the relevant contract—whether the resources are located within the CAISO BAA or in an external BAA. Similarly, in cases where an LSE located in an external BAA has competed to obtain a forward commitment of real physical supply from identified resources and has verified that it has not been “double sold” to an entity in the CAISO BAA or another region, then that LSE should have priority to the energy associated with that contract. In either case, it is critically important to the reliability of the grid that the source BAA respect the other region’s priority.

It is less clear who should have priority in other cases, however. For instance, from its review of publicly available information, Powerex believes that it is likely that a portion of the exports to the Southwest that were curtailed by the CAISO were associated with marketers that made advanced sales to both regions (i.e., prior to the CAISO day-ahead market) for a total quantity that
exceeded the quantity of supply those entities had actually secured in advance. In some cases, these marketers may have been scheduling imports into the CAISO BAA—including to meet their forward firm energy and/or standalone RA commitments—while simultaneously attempting to export energy in the same hours from the CAISO BAA to meet their advanced sales commitments to external Southwest LSEs.

When LSEs in both California and in the Southwest are unable to take sufficient steps to ensure that their forward purchases are supported by real, physical supply that has not been double-counted, there is inevitably an elevated risk of delivery failures, as marketers may be unable to fulfill all of their sales commitments during critical hours. The CAISO’s curtailment of firm exports this summer had the effect of reducing the CAISO BAA’s exposure to the consequences of marketers selling more supply than they had secured; at the same time, multiple southwest BAAs were faced with considerable delivery shortfalls in their forward and day-ahead firm energy purchases. Powerex believes that addressing the fundamental need to transparently identify the source generation behind supply commitments under the California RA program and in the forward supply procurement of external BAAs is necessary, prior to developing a fair and equitable approach on the priority of exports relative to internal load, including appropriate curtailment priorities.

It is similarly unclear who should have priority access to spot market imports made through CAISO’s intertie bidding framework—particularly during periods where prevailing bilateral market prices in external regions exceed those inside the CAISO BAA. Notably, prices in the Southwest were significantly above prices within the CAISO during the recent summer heatwave event; yet, CAISO was able to use its intertie bidding framework, and current market award processes and curtailment priorities, to achieve a priority claim to spot market import offers from the Northwest region (instead of competing with external regions for the associated Northwest spot market supply).

Powerex believes that the manner in which these issues are resolved will have far reaching consequences throughout the west and warrant consideration as part of a separate stakeholder proceeding. As part of this proceeding, CAISO should also further explore the events of this summer and the nature of the exports that were curtailed. While the analyses of the heat wave that have been prepared acknowledge CAISO’s curtailment of exports, none of these analyses have considered the nature of the exports at issue and whether these exports represented supply associated with marketers that made commitments to both California LSEs and Southwest LSEs that could not be simultaneously fulfilled. Providing further clarity regarding the supply arrangements underlying these exports would help inform CAISO’s efforts to evaluate curtailment priority as well as its effort to reform its RA framework to eliminate opportunities for selling paper capacity and the double-selling of capacity.