

Stakeholder Comments Template

Subject: Regional Resource Adequacy Initiative

Submitted by	Company	Date Submitted
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Please provide feedback on the Regional RA Revised Straw Proposal topics:

General

Xcel appreciates the opportunity to comment on CAISO’s revised straw proposal for regional resource adequacy and the effort the ISO and its stakeholders are going through to come up with an approach on this important issue.

Xcel views Resource Adequacy (“RA”) as a state-jurisdictional issue that should be managed for compliance on an annual basis, and does not support development of any sort of real-time resource adequacy compliance metrics. We recommend that RA be a capacity sufficiency mechanism used to ensure appropriate readiness and planning for the year and not a real-time dispatch tool. By having enough RA planned in advance, real-time operations will be able to manage the system with sufficient capacity for reliability needs. We believe a real-time design with sufficiency of offered resources should be an inherent part of operations management rather than an RA issue, for instance, through outage schedule coordination and enforcement of physical withholding impact thresholds by the market monitoring function.

In other RTO markets where we operate, there is a must-offer obligation for designated network resources. For example, in SPP each LSE has a minimum offer obligation equal to their forecasted demand plus their share of operating reserve obligations. In MISO, all available designated network resources have an offer obligation. Obviously, certain conditions and availability considerations must be able to modify the offer obligations, for instance on run-limited resources, an opportunity cost component is allowed into the offer curve to ensure critical resources remain available for critical periods.

We note that other regions, despite high renewable penetration, have not elected to define flexibility as a long-term resource adequacy issue and instead address the need for sufficient ramping capability through operational anticipation of headroom and operating reserve criteria. We recommend that issues of flexible capacity should be left to short-term processes, closer to real-time, because flexible capacity facilitates optimal dispatch of the market, and isn’t needed to demonstrate capacity sufficiency.

ISO/RTOs can be used to gain efficiencies in the RA process via the calculation of aggregated sufficiency margins and overseeing compliance. We believe that the appropriate mechanism to establish an RA margin for a combined region is through use of an LOLE analysis, which is the

technique used in SPP and MISO. We are concerned that the deterministic method, which seems to be preferred by CAISO, would not result in sufficient diversity benefits to the RA margin and would leave potential efficiency improvements unrealized for the expanded region.

Load Forecasting

CAISO should develop a methodology that enables it to aggregate the various LSE forecasts but should leave the individual forecasting to the individual LSEs. Some LSE's are subject to regulatory review and the ISO should not be able to override an approved forecast by a regulatory authority. Even if the ISO becomes the monitoring and compliance authority for the entire RA process, the jurisdictional oversight and the obligation to serve will incent the individual LSEs to develop accurate forecasts for use in the RA process.

Maximum Import Capability

We request the ISO explain how it will treat an internal LSE that holds firm transmission rights to serve its zonal load from an external generator that is a designated network resource compared to the treatment of an LSE in the same zone that has no transmission service across the same intertie.

An LSE's firm transmission service rights from an external network resource should be allocated solely and fully to that LSE's RA credits and any shared MIC allocation calculation should be decremented accordingly. For example, if the historical MIC on an intertie is 1000 MW, and an LSE inside CAISO has 150MW of firm transmission service sourcing at an external generator (designated as a network resource and accredited for 150 MW), that LSE should receive the full 150 MW of credit towards its RA obligation. This allocation should occur regardless of the zone the LSE is located, and the remaining MIC calculation allocated to the remainder of the zone should start at 850 MW for that tie. If the ISO design does not respect the transmission rights and allocates RA rights across all LSE's (by either lowering the total obligation of the zone of the LSEs or simply allocating the MIC pro-rata to the LSEs), then the LSE that holds the transmission service rights has effectively subsidized all of the other LSEs in the ISO (or zone) for the use on that path.

Also, we request CAISO provide examples of how the calculation of MIC will change if the footprint of the ISO expands. An import location today may soon be an internal node on the system, which will make historical usage information less reliable.

Internal RA Transfer Capability Constraints

CAISO has requested feedback on how the criteria and guidelines for creating the RA zones. We would reiterate our comments from above that CAISO should carve out external and internal designated network resources with associated firm delivery rights that are serving zonal loads. For an internal example, if today an RA generator in PACE is serving an LSE in the existing ISO, the firm transmission rights that make the PACE source deliverable as RA to the ISO should be carved out of the new internal RA transfer calculation once the ISO expands. By adding PACE to the ISO, the RA generator, with firm transmission rights to the load, should not be at risk for being stranded and unable to serve as RA (for its full amount) to the load simply because the ISO expanded and the generator and load are in different zones. This practice is consistent with the contract-path methodology used in the West and supporting analysis has already demonstrated that the generator

is deliverable to that LSE through the transmission service evaluation. An additional study on transfer capability from the generator to a zone, to serve the load inside the zone, seems redundant and unnecessary.

On an a related issue of sufficient operating capability, if CAISO has concerns about contingency reserve deliverability in real-time, then it should perform a separate contingency reserve deliverability study, similar to what other RTOs have performed in order to establish general zonal resource procurement targets for ancillary services.

In order to determine the RA zones, we recommend CAISO use an evaluation of expected sub-regional markets and not rely solely on geographic features or legacy Balancing Authority boundaries. The legacy boundaries do not necessarily represent the relevant electrical capability of the system. Also, similar to the MIC comments, Xcel requests CAISO provide examples of how the internal RA Transfers Capability constraints will affect the RA process and results.

Allocating RA Requirements to LRAs/LSEs

Xcel supports the ISO proposal to create a mechanism where LRAs or state agencies could voluntarily elect to defer allocation of RA requirements to the ISO.

Updating ISO Tariff Language to be More Generic

Tariff language should be broad enough to address the potential for additional LSEs outside of the state and for non-jurisdictional entities.

Reliability Assessment

a. Planning Reserve Margin

Xcel supports the use of an LOLE calculation under the consolidated footprint. This method is an industry best practice used in other regions and it has generally reduced RA margin criteria, while preserving the reliability of the system. We have concerns about the use of a deterministic approach because it may not result in the most efficient reduction in the applicable RA margin criteria.

b. Uniform Counting Methodologies

Xcel generally supports the methods proposed for calculating capacity on the various generator technologies, including some form of capacity recognition of batteries.

c. Backstop Procurement Authority

Xcel agrees that the ISO needs a mechanism to ensure compliance with the RA rules. If a customer is taking network service under its tariff, regardless of jurisdiction, the ISO should have the authority to identify gaps and require a customer to procure sufficient RA or pay a penalty that can be used to compensate other network customers with excess RA capacity.

