

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to
Oversee the Resource Adequacy
Program, Consider Program
Refinements, and Establish Forward
Resource Adequacy Procurement
Obligations

Rulemaking 19-11-009
(Filed November 7, 2019)

**COMMENTS ON TRACK 1 PROPOSALS OF
THE DEPARTMENT OF MARKET MONITORING OF
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

The Department of Market Monitoring (DMM) of the California Independent System Operator Corporation (CAISO) submits these comments on parties' Track 1 proposals, filed February 28, 2020. As defined in the Assigned Commissioner's Scoping Memo and Ruling, Track 1 of this rulemaking considers revisions to RA import rules.¹

I. INTRODUCTION

DMM appreciates the Commission and the CAISO moving forward on the issue of non-resource specific resource adequacy imports. Various aspects of parties' Track 1 proposals represent significant improvements over current rules for non-resource specific RA imports.

Many of these changes are aimed at addressing DMM's longstanding concern that under current rules non-resource specific RA import capacity can bid at or near the \$1,000/MWh bid cap in the day-ahead market and have no further obligation to be available in real-time if not scheduled in the day-ahead market or residual unit

¹ *Assigned Commissioner's Scoping Memo and Ruling*, R.19-11-009, January 22, 2020.

commitment (“RUC”) process. This gap in current market rules creates the potential for RA imports which are not backed by actual generation capacity or available transmission, and which cannot be relied upon in the real-time market, to provide capacity needed to ensure system reliability. To address these concerns, DMM has previously recommended that the CAISO, CPUC and stakeholders come to an explicit policy decision on whether or not RA imports need to be backed by specific generation resources and how such requirements should be enforced in practice. DMM has also recommended that the CAISO consider establishing some type of real-time bidding obligation for RA imports that are not scheduled in the day-ahead market.

Several specific proposals submitted in this proceeding provide promising frameworks to address this difficult issue and merit further review, development and consideration. These include proposals submitted by the CAISO, SCE and Shell (“Joint Parties”), and the Energy Division. However, the effectiveness of all of these proposals depends on key details that would remain to be developed, approved and implemented.

The frameworks proposed by the CAISO and Joint Parties represent major steps forward in addressing DMM’s concerns with RA imports, but appear to require significant additional design development and regulatory timelines for approval and implementation. The Energy Division’s proposal appears to represent an option that may be more feasible and effective on a more immediate but interim basis until other options are developed. As noted in prior DMM comments and analysis submitted to the Commission, the framework proposed by the Energy Division appears to be an effective short term option if the energy delivery requirements are limited to the most critical hours and months in which the CAISO may need to rely on RA import capacity.

II. DISCUSSION

A. CAISO Proposal

Source specific resource adequacy requirements

A key element of the CAISO proposal is to require that RA imports be source specific. Requiring specific sources for imported capacity could help ensure resources are not double-counted across WECC BAAs. However, DMM believes that non-recallability provisions for import capacity are also necessary to ensure import RA is dedicated to the CAISO and cannot be curtailed by other BAAs, particularly when other BAAs also face supply shortages. DMM is concerned that CAISO's proposal to require source-specific information at the time of RA showings may increase capacity costs without ensuring that the source-specific import RA will be dedicated to serving CAISO load when load conditions are tightest across the west.

The CAISO proposes to require source-specific information at the time of RA showings. The CAISO explains that “[s]ource specification can be a specific generating unit, specified aggregation or system of resources, or specified balancing authority area, but should be clearly identified in advance.”² Requiring source specificity could help ensure that resources are not double-counted across WECC BAAs. However, DMM believes that non-recallability provisions for import capacity may also be necessary to ensure import RA is dedicated to the CAISO and cannot be curtailed by other BAAs, particularly when other BAAs also face supply shortages.

² *California Independent System Operator Corporation Track 1 Proposal*, footnote 2, p. 1.

Specification of the source of import RA may still not prevent imports from being backed by spot market purchases originating outside the specified source's BAA. For example, the scheduling coordinator could source an import from outside the source's BAA, "sink" in the specified RA source's BAA, and tag the final leg as an import into CAISO. Multiple path legs may span multiple BAAs with the last leg of the import sourcing from the specified source's BAA.

DMM has concerns about the reliability of RA imports which are backed by spot market purchases and rely on multiple legs of transmission (potentially through multiple BAAs) to reach CAISO. While excess generation and transmission capacity in WECC may be able to support such import transactions on most days, the deliverability of import RA backed by spot market purchases may be significantly reduced when multiple BAAs in WECC are constrained. If a BAA can curtail exports to CAISO in order to serve its native load, an import resource to CAISO delivered through the BAA cannot be counted on as a dedicated resource to the CAISO. The risk of an import transaction being curtailed increases when an import travels across multiple transmission paths and through multiple BAAs.

Coordination with other BAAs to define curtailment rules for RA imports will be important to ensure that import capacity procured by CAISO LSEs is dedicated to CAISO and cannot be recalled to serve the source BAA's native load when the source BAA cannot find other internal or external power to meet its native load. Non-recallability provisions will be important for situations when import RA is necessary for ensuring CAISO reliability – particularly when other BAAs in WECC also face supply shortages. Developing curtailment provisions across BAAs may require further coordination among

WECC BAAs. However, such coordination will be critical for ensuring the credibility of import RA to CAISO and to other BAAs who may count import capacity towards meeting BAA reliability requirements.

Firm transmission requirements

Another issue that has been proposed by CAISO and some other entities for ensuring the reliability of RA imports is to require that RA imports include firm transmission rights. While requiring firm transmission could also improve the reliability of import capacity, DMM believes that proposals to require a showing of firm transmission warrant further discussion, data collection and analysis. The competitiveness of markets for firm transmission and processes for the release of firm transmission rights across different BAAs should be assessed further before a firm transmission requirement is adopted. The CAISO, CPUC, and stakeholders should thoroughly review and consider the practices, procedures, and timelines of BAAs in WECC for selling firm transmission rights.

For example, DMM is concerned firm transmission requirements for import RA resources could create competitive advantages for holders of firm transmission service on major paths. DMM recommends that the market for firm transmission in varying release timeframes should be assessed further before requiring that import RA be backed by firm transmission.

The CAISO proposes that non-resource-specific import RA provide a showing of firm transmission from source to the CAISO BAA. The CAISO states that demonstration of firm transmission at the time of monthly showings is preferred, but acknowledges that the Commission “should consider the timing of requirements for

securing firm transmission carefully to balance cost, market efficiency, and reliability.”³ DMM believes this proposal warrants further discussion. The CAISO, CPUC, and other stakeholders should transparently vet the practices, procedures, and timelines of BAAs in WECC for selling firm transmission rights and subsequently requiring the release of unused transmission before requirements for firm transmission are developed.

Firm transmission requirements for import RA resources could create competitive advantages in the RA market for holders of firm transmission service on major paths. Transparent vetting of the key features of transmission markets outside CAISO may be necessary to assess the extent to which CAISO’s proposal would enable entities with market power in external transmission markets to exercise that market power in California’s resource adequacy capacity markets.

DMM has expressed that firm transmission release, provision, and tagging rules could be reconsidered in the context of the CAISO’s Extended Day-ahead Market (“EDAM”) initiative which is considering how resource sufficiency requirements should be defined for EIM BAAs to participate in an extended CAISO day-ahead market. DMM recommended that the CAISO and stakeholders openly analyze and discuss the extent to which current WECC transmission access protocols may limit the competitiveness of a market for firm transmission in the context of EDAM resource sufficiency, and consider how existing transmission procurement and release timelines might be changed to promote competitive transmission access in the west as western electricity markets evolve.⁴

³ *California Independent System Operator Corporation Track 1 Proposal*, p. 6.

⁴ *DMM Comments on Extended Day-Ahead Market: February 11-12, 2020 Stakeholder Workshop Bundle 1 Topics*, DMM, February 26, 2020, pp. 1-2: <http://www.caiso.com/InitiativeDocuments/DMMComments-ExtendedDay-AheadMarketTechnicalWorkshop-Feb11-12-2020.pdf>

DMM believes the same issues – competitiveness of firm transmission procurement in varying timelines and across different BAAs – should be considered in the context of CAISO import RA before requirements are developed that require import RA demonstrate delivery across firm transmission.

Real-time Must Offer or Availability Obligations

DMM has also recommended that the CAISO, Commission and stakeholders consider establishing some type of real-time bidding obligation for RA imports that are not scheduled in the day-ahead market. DMM's review indicates that other ISOs require that capacity imports being used to meet capacity market or resource adequacy obligations be tied to specific generation resources and is not recallable once scheduled. However, these other ISO's processes also have requirements and provisions to ensure that this capacity is made available in the real-time market even if not scheduled on a day-ahead basis.⁵

The CAISO considered DMM's recommendation concerning the concept of a real-time must offer obligation for RA imports as part of its 2019 Resource Adequacy Enhancements initiative, but decided not to pursue this option. However, the CAISO's proposal in these proceedings indicates the CAISO is open to pursuing options for ensuring that resource specific capacity being used to meet RA requirements must be offered or available to be called upon by the CAISO in the real-time market.⁶ The potential options discussed in the CAISO comments might effectively address this

⁵ *DMM Comments on Resource Adequacy Enhancements Revised Straw Proposal*, July 24, 2019. <http://www.caiso.com/Documents/DMMComments-ResourceAdequacyEnhancements-RevisedStrawProposal.pdf>

⁶ *California Independent System Operator Corporation Track 1 Proposal*, p. 2 and p. 13.

issue, but the details of this concept would need to be carefully developed and considered. Like other key aspects of the CAISO proposal discussed above, this also appears to require significant additional development and regulatory timelines for approval and implementation.

Requiring import RA to specify a source and to have a real-time must offer obligation could be a significant interim enhancement to current RA rules while CAISO develops non-recallability provisions. However, it is unlikely that the details of such a proposal could be developed in time to be implemented for the 2021 RA compliance year. Therefore, other interim proposals that can be implemented for the 2021 RA compliance year should be considered.

B. Joint Parties Proposal

SCE and Shell (Joint Parties) propose that import RA contracts be structured as call option contracts with maximum strike prices below the current CAISO bid cap of \$1,000/MWh.⁷ DMM believes that establishing a strike price within import RA contracts could address concerns about import RA resources bidding at or close to the bid cap, while continuing to allow import resources to participate flexibly in CAISO markets. This approach may also provide flexibility in energy contracting and allow load serving entities to utilize RA imports as part of efforts to hedge energy costs.

However, like the CAISO's proposal, the effectiveness of the Joint Parties' proposal would hinge on key details that have not yet been developed and which must be carefully considered. This process would appear to require significant additional time for development, regulatory approval and implementation.

C. Energy Division proposal

The Energy Division proposes that non-resource specific RA imports could continue to count towards meeting RA requirements, but that contracts underlying these resources must have fixed energy price provisions and include no curtailment and energy delivery provisions. DMM previously supported clarifying that non-resource specific import RA be subject to an energy delivery requirement limited to the CAISO availability assessment hours as an interim measure.⁸ Various parties have raised

⁷ *Southern California Edison Company (U 338-E) and Shell Energy North America (US), L.P.'s Track 1 Proposal*, p. 4.

⁸ *Comments on Proposed Decision Clarifying Resource Adequacy Import Rules*, R.17-09-020, DMM, September 26, 2019:

<http://www.caiso.com/Documents/CommentsofDepartmentofMarketMonitoringonProposedDecisionClarifyingRAImportRules-R17-09-020-Sept262019.pdf>

concerns that an energy delivery requirement could present issues for system flexibility issues and contribute to the curtailment of renewable generation.

However, DMM analysis showed that requiring delivery of all RA imports only during availability assessment hours would primarily result in reduced scheduling of virtual supply, natural gas generation and non-RA imports in the day-ahead market. Any impacts on the scheduling of wind and solar resources would likely be extremely low and limited to wind and solar resources with positively priced energy bids. DMM's analysis also showed that limiting energy delivery requirements to the availability assessment hours would avoid additional self-scheduling during periods of very low and negative prices.⁹ Because low system prices sometimes coincide with assessment hours in spring months (March to April), DMM suggests that the Commission could consider further limiting delivery requirements in spring months.

The Energy Division's proposal would address DMM's longstanding concern that non-resource specific RA import capacity can simply bid at or near the \$1,000/MWh bid cap in the day-ahead market and have no further obligation to be available in real-time if not scheduled in the day-ahead market or residual unit commitment ("RUC") process. The proposal would also reduce concerns that import RA capacity can receive capacity payments while providing no real benefits in terms of either system reliability or market competitiveness.

However, DMM supports the Energy Division's proposal only as an *interim* measure to address concerns about observed market participation of non-resource-specific import RA while the Commission and the CAISO continue to work on

⁹ *Ibid.*, pp. 12-14.

implementing real-time must offer obligations for import RA and on developing non-recallability provisions that ensure import capacity counted on by any BAA to meet reliability requirements cannot be recalled by external BAAs.

III. CONCLUSION

Developing non-recallability provisions and enhancing firm transmission procedures may require further coordination among CAISO and other WECC BAAs. However, exploring these issues could ultimately help develop rules that improve the reliability of import capacity across the west, ensure supply is not double counted among WECC BAAs, and ensure that firm transmission requirements for resource adequacy imports do not undermine the competitiveness of markets for this critical capacity.

The frameworks proposed by the CAISO and Joint Parties both represent promising frameworks for redesigning rules for RA imports, but appear to require significant additional development and regulatory timelines for approval and implementation. The Energy Division's proposal appears to represent an option that may be more feasible and effective on a more immediate but interim basis until other options are developed. Thus, DMM supports the Energy Division's proposal as an interim measure to continue to allow energy contracts to count towards meeting RA requirements while enforcing an energy delivery requirement limited to CAISO availability assessment hours.

Respectfully submitted,

By: /s/ Eric Hildebrandt

Eric Hildebrandt, Ph.D.
Executive Director, Market Monitoring
Ryan Kurlinski
Manager, Analysis & Mitigation Group
Cristy Sanada
Senior Analyst
Department of Market Monitoring
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: 916- 608-7150
rkurlinski@caiso.com

Independent Market Monitor for the California
Independent System Operator

Dated March 6, 2020