

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

Order Instituting Rulemaking to
Oversee the Resource Adequacy
Program, Consider Program
Refinements, and Establish Annual
Local and Flexible Procurement
Obligations for the 2019 and 2020
Compliance Years.

Rulemaking 17-09-020

**COMMENTS ON PROPOSED DECISION
ADOPTING RESOURCE ADEQUACY IMPORT REQUIREMENTS 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 the Commission’s *Proposed Decision Adopting Resource Adequacy Import Requirements* (“Proposed Decision”), filed May 18, 2020.

I. OVERVIEW

In the proposed decision, the Commission “adopts revisions to the Resource Adequacy import rules based on Energy Division’s proposal, with modifications.”¹ The Commission notes it will also “consider the California Independent System Operator (CAISO) and Powerex Corp.’s proposal in a subsequent Resource Adequacy proceeding after further development through the CAISO’s processes.”²

In opening comments on Track 1 proposals under R.19-11-009, DMM supported Energy Division’s proposal as a viable interim solution for improving the reliability of

¹ *Proposed Decision*, p.9.

² *Ibid*, p.9.

resource adequacy imports, while the Commission and CAISO continue to work on implementing real-time must offer obligations for import resource adequacy and developing non-recallability provisions to ensure that imports counted on by CAISO cannot be recalled by external balancing areas.³ DMM supports the Commission's proposed decision which effectuates this approach with some modifications to Energy Division's proposal. DMM believes the Commission's proposed decision represents a significant improvement over current rules governing non-resource specific imports and can be implemented in the short-term as an interim measure. DMM supports the Commission's proposal to revisit import resource adequacy rules in a subsequent resource adequacy proceeding after various details surrounding a source-specific framework are discussed further among stakeholders.

The Commission's proposed decision would address DMM's longstanding concern that resource adequacy 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 proposed decision would also address DMM's concerns that import resource adequacy can receive capacity payments while providing no real benefits in terms of either system reliability or market competitiveness. However, DMM recognizes that market efficiency and system flexibility could be improved by avoiding large volumes of bids below each resource's marginal cost in the CAISO market. Therefore, while DMM is supportive of the Commission's proposed decision as

³ *Comments on Track 1 proposals*, Rulemaking 19-11-009, Department of Market Monitoring, March 6, 2020, pp. 10-11: <http://www.caiso.com/Documents/CPUC-CommentsonTrack1ProposalsoftheDepartmentofMarketMonitoring-R19-11-009-Mar62020.pdf>

an interim measure, DMM also supports consideration of alternative solutions in a subsequent proceeding that would allow import resource adequacy to participate more flexibly in the market.

While the proposed decision does not directly ensure that supply backing import resource adequacy will not be double counted across WECC, DMM generally agrees with the Commission that a requirement to bid at or below \$0/MWh could help ensure that import capacity will be backed by a dedicated source. A source-specific framework which ensures that import energy cannot be recalled to other balancing areas, particularly when other balancing areas also face supply shortages, could further ensure that import capacity is truly dedicated to the CAISO. However, feedback from stakeholders including DMM suggest that several details regarding a source-specific framework require further discussion and development. Therefore, DMM is supportive of the Commission's proposed decision as an interim measure, while rules governing a source-specific framework are developed further under the CAISO's Resource Adequacy Enhancements stakeholder process and incorporated into a subsequent resource adequacy proceeding.

II. DISCUSSION

A. Requirements for resource adequacy imports to bid at or below \$0/MWh

The Commission's proposed decision adopts a self-schedule requirement for non-resource-specific resource adequacy imports. To address concerns about increased levels of self-schedules and impacts to system flexibility, the Commission's proposed decision adopts Energy Division's proposal that an energy self-schedule requirement apply only to the resource adequacy availability assessment hours ("AAH") from 4:00 to

9:00 p.m on non-holiday weekdays. Further, the Commission will allow the energy delivery requirement to be met with \$0/MWh or negative bids. As explained in the proposed decision:

The Commission is convinced that limiting the self-schedule requirement to the AAH window, consistent with the MCC buckets, minimizes concerns of self-scheduling during negative pricing periods by delivering energy when there is high demand. Further, we view bidding resources in at levels between negative \$150/MWh and \$0/MWh as tantamount to a self-scheduling requirement, and thus, it is reasonable to add this bidding option as an alternative to the self-schedule requirement. LSEs can further manage potential market inefficiencies in other ways, such as relying on RA imports to a lesser degree in spring and off-peak months, when negative prices are more likely to occur.⁴

In opening comments on D.19-10-021, DMM submitted analysis of the potential impacts of a self-schedule requirement for resource adequacy imports based on day-ahead market data for 2018 and 2019.⁵ This analysis shows that limiting a self-schedule requirement for resource adequacy imports to the availability assessment hours would primarily result in reduced scheduling of virtual supply, natural gas generation and non-resource adequacy imports in the day-ahead market. Any impacts on the scheduling of wind and solar resources would be extremely low and limited to wind and solar resources with positively priced energy bids. DMM's analysis also shows that limiting a self-schedule requirement to the availability assessment hours would avoid additional self-scheduling during periods of very low and negative prices. The Commission's proposal to allow resources to submit \$0/MWh or negative bids to meet the energy delivery requirement would further reduce the impacts of the proposed

⁴ *Proposed Decision*, p. 42.

⁵ *DMM comments on proposed decision clarifying resource adequacy import rules*, Department of Market Monitoring, September 26, 2019: <http://www.caiso.com/Documents/CommentsofDepartmentofMarketMonitoringonProposedDecisionClarifyingRAImportRules-R17-09-020-Sept262019.pdf>

energy delivery requirement. As long as renewable resources continue to receive tax credits that make their effective marginal cost of production less than zero, the Commission's proposed decision should enable non-resource specific import resource adequacy resources to avoid dispatches that displace expected wind or solar output bidding at marginal cost.

Based on this analysis, DMM supports the Commission's proposed decision to adopt a \$0/MWh or lower bidding requirement limited to the availability assessment hours as a temporary measure. The Commission's proposed decision would address DMM's longstanding concern that resource adequacy 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 process.

DMM recognizes that market efficiency and system flexibility could be improved by avoiding large volumes of bids below resources' marginal costs in the CAISO market. Therefore, while DMM is supportive of the Commission's proposed decision as an interim measure, DMM supports consideration of alternative solutions that would allow import resource adequacy to participate more flexibly in the market in a subsequent resource adequacy proceeding.

B. Alternative long-term solutions

In comments on Track 1 proposals, DMM expressed the view that other solutions proposed in this proceeding and discussed at the CAISO are potentially more viable long terms solutions to improve the reliability of import resource adequacy and address

system market power concerns. Alternative proposals could also allow import capacity to participate more flexibly in CAISO markets.

In the proposed decision, the Commission rejects proposals by Shell/SCE, Morgan Stanley, and CalCCA which specify price caps for non-resource specific import capacity below the \$1,000/MWh bid cap. The Commission reasons that these proposals do not address concerns that import capacity may not be backed by dedicated physical sources. DMM generally agrees that setting lower price caps for import resource adequacy bids would not directly address the potential for double counting of supply among balancing areas. However, DMM sees value in continued discussion on what might constitute appropriate offer prices for import resources.

A source-specific framework for import resource adequacy such as those proposed by CAISO and Powerex could ultimately be more effective to ensure supply is not double counted towards resource sufficiency requirements for balancing areas across the west. However, various other rules and details that would be incorporated in any such source-specific framework would require further discussion and development for this approach to be effective. Key details that would determine the effectiveness of a source-specific framework include real-time must offer obligations, provision of transmission, and provisions to ensure imported energy from resource adequacy capacity cannot be recalled by other balancing areas.

For example, to ensure supply is truly dedicated to the CAISO it is important to clarify non-recallability provisions which ensure that the energy backing import resource adequacy cannot be recalled by external balancing areas (even in the absence of

transmission congestion).⁶ The CAISO has suggested that firm transmission rights from source to the CAISO border would ensure import energy is treated with the same priority as native load when a source balancing area is short of energy but there is no transmission congestion. DMM believes that this suggestion requires further explanation and verification before relying on a firm transmission requirement to supplant potential non-recallability provisions.

Even if the ISO's suggestion is accurate, DMM and various other parties have expressed separate concerns about whether a firm transmission requirement could create competitive advantages for holders of firm transmission service on major paths. Therefore, DMM agrees with the Commission's assessment that any rule requiring firm transmission requires further development.⁷

DMM also agrees with the Commission's overall assessment that source-specific proposals require further development at this time, and DMM supports the Commission's proposal to consider a source-specific framework in a subsequent resource adequacy proceeding after further development in CAISO processes.

III. **CONCLUSION**

DMM supports the Commission's proposed decision for resource adequacy import rules as a temporary measure. Limiting the \$0/MWh or lower bid requirement to the availability assessment hours would limit scheduling of additional resource adequacy imports at prices below the underlying resources' true marginal costs to hours when this

⁶ *Comments on Resource Adequacy Enhancements Fourth Revised Straw Proposal*, Department of Market Monitoring, April 21, 2020, pp. 1-3: <http://www.caiso.com/InitiativeDocuments/DMMComments-ResourceAdequacyEnhancements-FourthRevisedStrawProposal.pdf>

⁷ *Proposed Decision*, p. 48.

energy is needed most for the CAISO system. Based on analysis submitted by DMM in prior comments, it appears that the Commission's proposed decision is not likely to result in significant displacement of renewable generation or cause a significant increase in low negative prices, even if applied throughout the year.⁸

DMM recognizes that market efficiency and system flexibility could be improved by avoiding large volumes of bids below resources' marginal costs in the CAISO market. Therefore, while DMM is supportive of the Commission's proposed decision as an interim measure, DMM supports consideration of alternative solutions that would allow import resource adequacy to participate more flexibly in the market. Other solutions that have been discussed in this proceeding and at the CAISO are potentially more viable long terms solutions to improve the reliability of import resource adequacy and address system market power concerns.

A source-specific framework could be more effective to ensure supply is not double counted for resource sufficiency across the west. However, DMM agrees with the Commission that various elements of this type of framework such as must-offer obligations, transmission provision, and ensuring imported energy cannot be recalled by other balancing areas, would require further discussion and development. Therefore DMM supports the Commission's proposal to consider a source-specific framework in a subsequent resource adequacy proceeding after further development in CAISO processes.

⁸ *DMM comments on proposed decision clarifying resource adequacy import rules*, September 26, 2019.

Respectfully submitted,

By: /s/ Eric Hildebrandt

Eric Hildebrandt, Ph.D.
Executive Director, Market Monitoring

Ryan Kurlinski
Manager, Analysis and Mitigation

Cristy Sanada
Senior Analyst

Department of Market Monitoring
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: 916-351-2447
csanada@caiso.com

Department of Market Monitoring of the California
Independent System Operator Corporation

Dated June 8, 2020