

**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 4 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 4 proposals, filed January 28, 2021. As outlined in the Assigned Commissioner's Amended Track 3B and Track 4 Scoping Memo and Ruling, Track 4 of this rulemaking considers several "time-sensitive" refinements to the current resource adequacy framework.¹

I. INTRODUCTION

DMM provides comments on aspects of the ISO's Track 4 Proposals² and Energy Division's Track 4 Proposals.³

DMM supports the ISO's proposal to discontinue applying a planning reserve margin adder to demand response capacity values. DMM has observed that the planning reserve margin adder applied to demand response capacity values has resulted in demand response capacity

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

² *Track 4 proposals of the California Independent System Operator Corporation*, R.19-11-009, California ISO, January 28, 2021: <http://www.caiso.com/Documents/Jan28-2021-Track-4-Proposals-ResourceAdequacyProgram-R1911009.pdf>

³ *Energy Division Proposals for Proceeding R.19-11-009*, CPUC Energy Division, January 28, 2021: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M362/K898/362898786.PDF>

being over-counted compared to the actual resource adequacy contribution from underlying resources in the operating timeframe.

DMM also supports the ISO's proposal to discontinue the practice of non-net neutral resource adequacy crediting, essentially requiring any non-net neutral capacity to be shown on resource adequacy supply plans. Subjecting this capacity to the same must-offer rules and availability incentives as other resource adequacy resources would allow for more consistent treatment across resources counted towards resource adequacy requirements. However, DMM recognizes that there are other significant issues to resolve should this proposal be adopted.

While DMM shares concerns with Energy Division that some demand response providers have bid very high start-up costs for the amount of capacity offered, DMM does not necessarily agree with Energy Division's proposal to disallow demand response resources from submitting non-zero start-up costs. DMM believes that there may be cases where start-up costs may be appropriate for some demand response resources. Instead, DMM has recommended (and the ISO is currently working on) clarifying ISO guidelines for developing commitment costs for non-thermal resources and taking additional steps to assess the validity of demand response commitment cost parameters submitted to the ISO's master file.

Energy Division indicates that incremental solar capacity may provide little to no marginal value in terms of providing reliability benefits under the current resource adequacy framework.⁴ Therefore, under the existing resource adequacy framework, it may be appropriate to assign new solar resources (subject to certain exemptions) a zero qualifying capacity value to help ensure that capacity values are not overstated. However, the energy that solar resources provide undoubtedly provides value in terms of serving load across the day and providing a

⁴ *Ibid.*, p. 7.

source of energy from which storage capacity can charge to help meet demand in net peak hours and through the night. This issue highlights the importance of a shift in the resource adequacy framework to value not just capacity needed to meet gross and net load peaks, but also the energy required to meet demand across the day including charging demand from storage resources.

II. DISCUSSION

A. DMM supports the ISO's proposal to discontinue applying a planning reserve margin adder to demand response capacity values.

DMM supports the ISO's proposal to discontinue applying a planning reserve margin adder to demand response capacity values. As noted in recent DMM reports, the planning reserve margin adder applied to demand response capacity values, which does not represent actual supply that the ISO can call on, has resulted in demand response capacity being over-counted compared to the resource adequacy contribution from underlying resources in the operating timeframe.⁵

The application of the planning reserve margin adder to demand response capacity results in reducing monthly resource adequacy requirements up front. However, as noted by the ISO, in the operating timeframe the ISO procures supply and reserves to serve all load, including load

⁵ *Report on system and market conditions, issues and performance: August and September 2020*, Department of Market Monitoring, November 24, 2020, pp. 55-59:
<http://www.caiso.com/Documents/ReportonMarketConditionsIssuesandPerformanceAugustandSeptember2020-Nov242020.pdf>

Demand response issues and performance, Department of Market Monitoring, February 25, 2021:
<http://www.caiso.com/Documents/ReportonDemandResponseIssuesandPerformance-Feb252021.pdf>

that may be curtailed in real-time by demand response resources which are modeled as supply.⁶ DMM ultimately agrees with the ISO's assertion that "...the PRM adder inappropriately reduces the available resource adequacy capacity needed by the system."⁷ The application of the planning reserve margin adder to demand response capacity could potentially leave the system short when all resource adequacy capacity is needed to meet peak load and reserve requirements.

The issue of applying the planning reserve margin adder to demand response capacity was particularly significant on high load days in August and September 2020. The planning reserve margin adder contributed to reducing resource adequacy obligations by 193 megawatts in August and 184 megawatts in September.⁸ However, on high load days in August and September, the capacity represented by this adder did not materialize as actual supply that the ISO could call on in days where all resource adequacy capacity was needed on the system, nor did this capacity reduce the load or reserve requirements that the ISO procured for on these days.

DMM believes that the planning reserve margin adder applied to demand response capacity results in overstating the underlying resources' contribution to resource adequacy requirements and results in displacing other supply which could effectively provide resource adequacy value. DMM therefore supports the ISO's proposal to discontinue applying a planning reserve margin adder to demand response capacity values.

⁶ *Track 4 proposals of the California Independent System Operator Corporation*, R.19-11-009, California ISO, January 28, 2021, p. 9: <http://www.caiso.com/Documents/Jan28-2021-Track-4-Proposals-ResourceAdequacyProgram-R1911009.pdf>

⁷ *Track 4 proposals of the California Independent System Operator Corporation*, p.10.

⁸ *Report on system and market conditions, issues and performance: August and September 2020*, DMM, pp. 57-59.

B. DMM supports the ISO’s proposal to discontinue the practice of non-net neutral resource adequacy crediting, essentially requiring any non-net neutral capacity to be shown on resource adequacy supply plans. However, DMM recognizes that there are important related issues to resolve should this proposal be adopted.

DMM supports the ISO’s proposal to discontinue the practice of non-net neutral resource adequacy crediting, essentially requiring any non-net neutral capacity to be shown on resource adequacy supply plans. Credited capacity is not subject to the same must-offer obligations and availability incentives as resources shown on resource adequacy supply plans. Subjecting credited resources to must-offer rules and availability incentives would allow for more consistent treatment across resources counted towards resource adequacy requirements and could strengthen incentives for all resource adequacy capacity to remain available to the ISO.

As noted in a recent DMM report, during peak net load hours on August 14 and August 15, about 970 to 1,100 MW of capacity associated with demand response resources and liquidated damages contracts that was credited toward meeting resource adequacy requirements was either not available or not directly accessible to the ISO.⁹ These figures include about 550 MW of credits used by non-CPUC jurisdictional load serving entities which DMM understands would also be discontinued under the ISO’s proposal. Credits associated with CPUC-jurisdictional load serving entities are primarily associated with utility demand response programs.

DMM recognizes that there are other significant issues to resolve should the ISO’s proposal be adopted. In particular, parties have raised concerns about the lack of a counting methodology for demand response resources that accounts for the variable nature of demand response availability. DMM agrees that counting methodologies for demand response which

⁹ *ibid.*, p. 33.

better capture resources' availability in peak load hours warrant further consideration. However, absent a counting methodology that accounts for the variable nature of demand response (and would allow these resources to be exempt from the ISO's RAAIM like other variable energy resources), the ISO's proposal could cause load-serving entities to more conservatively estimate the amount of demand response capacity to show on supply plans in order to minimize exposure to RAAIM. This effect could allow the ISO to have a more accurate picture of how much capacity is reliably available across peak load hours.

DMM has also recommended that the ISO adopt processes for manually dispatching available demand response capacity counted for resource adequacy. DMM observed in August and September 2020 that some available long-start proxy demand response capacity (both utility and supply plan demand response) was not committed in the day-ahead market and was not subsequently manually dispatched by the ISO. Therefore, this capacity was not available in real-time.¹⁰ Additionally some demand response resource adequacy capacity that was available in real-time (and was not ramp-limited) was not scheduled economically but was also not manually dispatched in periods of high load.¹¹ The ISO describes exceptional dispatch capabilities as one of the reasons why it will be important for credited capacity to be shown on resource adequacy supply plans.¹² To ensure that these benefits are realized, the ISO should continue to develop processes to ensure it can manually dispatch demand response capacity that would be shown on supply plans.

¹⁰ *Report on demand response issues and performance*, DMM, February 25, 2021, pp. 11-12.

¹¹ *Ibid.*, pp. 14-15.

¹² *Track 4 proposals of the California Independent System Operator Corporation*, R.19-11-009, California ISO, January 28, 2021, p. 3.

C. DMM shares concerns with Energy Division that some demand response providers have bid very high start-up costs for the amount of capacity offered, but DMM does not necessarily agree with Energy Division’s proposal to not allow demand response resources to submit non-zero start-up costs.

Last summer, DMM observed that some demand response resources had very high start-up cost bids for the amount of capacity offered, which resulted in these resources being uneconomic to commit in the day-ahead market, even on days with very high day-ahead prices.¹³ While DMM shares concerns with Energy Division that some demand response providers have bid very high start-up costs for the amount of capacity offered, DMM does not necessarily agree with Energy Division’s proposal to disallow demand response resources from submitting non-zero start-up costs.

DMM believes that there may be cases where start-up costs may be appropriate for some demand response programs. Instead, DMM has recommended (and the ISO is currently working on) clarifying ISO guidelines for developing commitment costs for non-thermal resources and taking additional steps to assess the validity of demand response commitment cost parameters submitted to the ISO’s master file.

D. Under the existing resource adequacy framework, it may be appropriate to assign new solar resources (subject to certain exemptions) a zero qualifying capacity value to help ensure that capacity values are not overstated. However, the energy that solar resources provide across the day provides value in terms of serving load across the day and providing a source of energy from which storage capacity can charge to help meet load in net peak hours and through the night.

Energy Division indicates that incremental solar capacity may provide little to no marginal value in terms of meeting gross and net peak load requirements. Therefore, under the existing resource adequacy framework, it may be appropriate to assign new solar resources (subject to certain exemptions) a zero qualifying capacity value to help ensure that capacity

¹³ *Report on demand response issues and performance*, DMM, February 25, 2021, pp. 12-14.

values are not overstated. Otherwise, if qualifying capacity values do not reflect the actual availability of resources during peak and net load peaks, the system could end up short when all resource adequacy capacity is required to serve load.

The over-counting of solar resource adequacy capacity during net peak load hours in August and September 2020 has been highlighted in the ISO/CPUC/CEC root cause report¹⁴ and DMM's report on the August and September heatwaves.¹⁵ As more solar capacity comes onto the system, the marginal reliability value of additional solar capacity will continue to decline under the current resource adequacy framework.

However, the energy that solar resources provide undoubtedly provides value in terms of serving load across the day and providing a source of energy from which storage capacity can charge to help meet demand in net peak hours and through the night. This issue highlights the importance of a shift in the resource adequacy framework to value not just capacity needed to meet gross and net load peaks, but also the energy required to meet demand across the day, including charging demand from storage resources. DMM sees Track 3B.2 of this rulemaking as being very important for continuing to recognize the reliability value that solar resources provide.

¹⁴ *Root cause analysis – Mid-August 2020 Extreme Heat Wave*, CAISO/CPUC/CEC, January 13, 2021, pp. 49-50: <http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf>

¹⁵ *Report on system and market conditions, issues and performance: August and September 2020*, DMM, November 24, 2020, pp. 25-28.

Respectfully submitted,

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