

**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 REVISED TRACK 3B.2 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 3B.2 revised proposals, filed December 18, 2020. As outlined in the Assigned Commissioner's Amended Track 3B and Track 4 Scoping Memo and Ruling, Track 3B.2 of this rulemaking considers the "Examination of the broader RA capacity structure to address energy attributes and hourly capacity requirements, given the increasing penetration of use-limited resources, greater reliance on preferred resources, rolling off of a significant amount of long-term tolling contracts held by utilities, and material increases in energy and capacity prices experienced in California over the past years."¹

I. INTRODUCTION

DMM shares the Commission's and other parties' concerns that as California increases its reliance on intermittent and availability and energy-limited resources, the current resource adequacy framework may no longer ensure that sufficient capacity and energy will be available to meet load and net load requirements. To help ensure that

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

sufficient capacity and energy will be available to meet load and net load needs going forward, DMM supports the general approaches laid out in several parties' proposals which would shift resource adequacy requirements away from being based solely on gross load peak, and would instead focus on capacity needs during the net load peak and energy sufficiency across all hours of the day.

DMM also shares some of Energy Division's concerns about the reduction in tolling arrangements and long-term contracts, and increase in shorter term RA-only contracts. DMM has made similar observations as the Energy Division. In recent years a number of regulatory and structural market changes have led to a reduction in tolling arrangements and forward contracting, and these changes could increase the potential for system level market power in the ISO balancing area.²

Energy Division's proposals go further to address concerns about reductions in long term tolling arrangements and forward contracting by including a financial hedging aspect to forward energy contracting requirements. While a fixed price forward energy requirement framework would represent a significant departure from the current resource adequacy structure and would warrant much further discussion, DMM sees value in exploring this type of framework further. This kind of framework could strengthen incentives for suppliers to reasonably estimate their supply availability and to deliver contracted energy.

² 2019 Annual Report on Market Issues and Performance, Department of Market Monitoring, June 2020, p. 295: <http://www.caiso.com/Documents/2019AnnualReportonMarketIssuesandPerformance.pdf>

II. DISCUSSION

A. Increased reliance on energy-limited and availability-limited resources

DMM shares the Commission's and other parties' concerns that as California increases its reliance on intermittent and energy-limited and availability-limited resources, the current resource adequacy framework may no longer ensure that sufficient capacity and energy will be available to meet load and net load requirements.

DMM has expressed concerns about the cumulative effects of increased reliance on energy and availability-limited resources such as solar, imports, demand response, and storage resources under the current resource adequacy framework, as these resources may have limited availability to deliver energy across peak net load hours.³ DMM observed that during the hours of load curtailment on August 14 and August 15, 2020, a significant amount of solar and demand response resource adequacy capacity was not available up to shown resource adequacy values.⁴ Additionally, though battery storage resources may be available up to resource adequacy values in any given hour from a megawatt perspective, DMM has observed that these resources often may not have sufficient state-of-charge going into the peak net load period to potentially deliver resource adequacy values for four consecutive hours.

To help ensure that sufficient capacity and energy will be available to meet load and net load needs going forward, DMM agrees with the general approaches laid out in

³ *Reply Comments of the Department of Market Monitoring, Rulemaking 16-02-007, August 12, 2019,* <http://www.caiso.com/Documents/CPUCDMMReplyCommentsonRulingInitiatingProcurementTrackandSeekingCommentonPotentialReliabilityIssues-Aug122019.pdf>

⁴ *Report on system and market conditions, issues and performance: August and September 2020, Department of Market Monitoring, November 24, 2020, p. 27:* <http://www.caiso.com/Documents/ReportonMarketConditionsIssuesandPerformanceAugustandSeptember2020-Nov242020.pdf>

several parties' proposals which would shift resource adequacy requirements away from being based solely on gross load peak, and would instead focus on capacity needs during the net load peak and energy sufficiency across all hours of the day. If forward procurement requirements capture gross load, net load, and energy sufficiency requirements (including sufficient energy to charge storage resources), then additional capacity and energy would be contracted by load serving entities to ensure sufficient supply could be available to meet load, net load, and energy requirements in a given compliance period. However, it may become increasingly difficult to develop standardized capacity and energy counting rules for resources with variable or limited output. Counting rules for energy in particular may be very difficult to develop given resources' different operating constraints and costs, and uncertainty about how these resources would ultimately be bid and scheduled in the ISO market.

B. Forward energy contracting

DMM shares some of Energy Division's concerns about the reduction in tolling arrangements and long-term contracts and the increase in shorter term RA-only contracts. DMM has made similar observations as the Energy Division: In recent years a number of regulatory and structural market changes have led to a reduction in tolling arrangements and forward contracting, and these changes could increase the potential for system level market power in the ISO balancing area.⁵ These structural changes include the expansion of retail choice, increased uncertainty about forward load serving

⁵ 2019 Annual Report on Market Issues and Performance, Department of Market Monitoring, June 2020, p. 295: <http://www.caiso.com/Documents/2019AnnualReportonMarketIssuesandPerformance.pdf>

obligations given potential load migration, and rolling off of long-term tolling arrangements held by investor-owned utilities.

In addition to concerns about increased reliance on energy and availability-limited resources in terms of being available to meet net load peak, DMM has also expressed concerns that these resources may provide limited benefits in terms of mitigating potential system market power due to lack of availability across peak net load hours and high marginal costs observed for certain resources types when made available. Some resources receiving capacity payments today may have limited additional incentives to be scheduled and to deliver energy in the CAISO market.

The existing resource adequacy framework is focused primarily on ensuring sufficient capacity for reliability, rather than for a competitive supply of energy or for hedging of high energy prices by load serving entities. Historically, the bulk of resource adequacy requirements have been met by generation under some form of energy tolling agreement or forward energy contract with load serving entities. “Bundling” of energy with capacity to meet resource adequacy requirements has helped to ensure a competitive supply of energy to the CAISO day-ahead and real-time energy markets. Forward energy contracts and tolling agreements reduce the amount of energy that must be purchased by load serving entities in the ISO’s spot markets, providing load serving entities with hedges against the potential for uncompetitive high energy prices.

Energy Division’s proposals go further than other parties’ proposals to address concerns about reductions in long term tolling arrangements and forward contracting by including a financial hedging aspect to forward energy contracting requirements. DMM sees value in exploring this type of framework further, which would embed an energy

hedging component into load serving entity contracting and also strengthen incentives for suppliers to reasonably estimate their supply availability and deliver contracted energy.

Strengthening incentives for suppliers to deliver contracted energy may be particularly relevant as it becomes more difficult to develop standardized capacity or energy counting rules for resources with variable or limited output. If procurement requirements are simply increased, or if capacity and energy counting rules are overly conservative to cover for uncertainty of supply availability, then load serving entities may ultimately bear the burden of contracting for more capacity and energy to cover for this uncertainty. On the other hand, some suppliers could benefit from over-estimating capacity or energy sold to load-serving entities while assuming limited risk of not being able to deliver that supply. Some supply may also continue to have little incentive to be available or actually deliver energy when needed, ultimately providing limited value in terms of reliability or mitigation of potential market power.

DMM realizes that shifting to a fixed price forward energy requirement framework would represent a significant departure from the current resource adequacy structure, and many aspects of the proposal warrant much further discussion. DMM looks forward to continued discussion on this proposal and other parties' proposals under this rulemaking.

Respectfully submitted,

By: /s/ Cristy Sanada

Eric Hildebrandt, Ph.D.
Executive Director, Market Monitoring
Ryan Kurlinski
Manager, Analysis & Mitigation Group
Cristy Sanada
Lead Analyst
Department of Market Monitoring
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630
Tel: 916-221-8623
csanada@caiso.com

Independent Market Monitor for the California
Independent System Operator

Dated January 15, 2021