

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

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

Rulemaking 23-10-011

**REPLY COMMENTS OF THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
ON TRACK 3 PROPOSALS**

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Table of Contents

I.	Introduction.....	1
II.	Discussion.....	2
A.	The Commission Should Establish a PRM for the RA Program that Meets a 0.1 LOLE Across the Year.....	2
B.	The Commission Should not Use a “Worst-Case” View of a Limited Set of Hours to Establish the PRM.....	2
C.	The CAISO Disagrees with the California Environmental Justice Alliance (CEJA) that the Commission Should Adopt a Lower PRM Because of the Availability of Emergency Supply.	3
D.	The CAISO Disagrees with SCE’s and PCF’s Recommendations that the Commission Adopt a 17% PRM with no “Effective” PRM for 2026.....	4
E.	PCF’s Statements About CAISO’s Outage Data and RAAIM are Inaccurate.	5
F.	The Commission Should Hold Additional Discussion on Multi-Day Reliability Events and Long-Duration Storage Accreditation Under SOD.....	5
III.	Conclusion	5

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I. Introduction

Pursuant to the *Assigned Commissioner's Amended Scoping Memo and Ruling* (Ruling) issued on November 1, 2024, the California Independent System Operator Corporation (CAISO) submits reply comments on Track 3 proposals filed in this proceeding.

The CAISO's reply comments primarily address opening comments on the 2026 planning reserve margin (PRM). The CAISO agrees with party concerns that Energy Division's Proposal A and Proposal B do not ensure a reliable resource adequacy (RA) fleet for 2026 because these proposals would result in RA requirements that fall well short of meeting a 0.1 loss of load expectation (LOLE) across the year. The CAISO also replies to other comments on the 2026 PRM from the Public Advocates Office (Cal Advocates), Southern California Edison Company (SCE), and the Protect Our Communities Foundation (PCF). Additionally, the CAISO corrects statements by PCF regarding CAISO outage data and the Resource Adequacy Availability Incentive Mechanism (RAAIM). Finally, the CAISO agrees with party recommendations that the Commission should scope further discussion on multi-day reliability needs and long duration storage counting rules under the Slice-of-Day (SOD) framework in a future track of the RA proceeding.

II. Discussion

A. The Commission Should Establish a PRM for the RA Program that Meets a 0.1 LOLE Across the Year.

The CAISO agrees with several parties' comments that the Commission should establish a PRM that meets a 0.1 LOLE target for 2026.¹ A 0.1 LOLE is an industry standard for reliability and is crucial in preventing capacity shortfalls. The CAISO agrees with party concerns that Energy Division's proposals for the 2026 PRM fall well short of the 0.1 LOLE target and will not adequately protect against reliability risks for 2026.

B. The Commission Should not Use a "Worst-Case" View of a Limited Set of Hours to Establish the PRM.

In opening comments, Cal Advocates recreates Energy Division's September 2026 stack analysis using more conservative supply assumptions to develop a "worst-case" scenario. Specifically, Cal Advocates "applied additional conservative assumptions to investigate a worst-case scenario for [Hours Ending (HE) 23-24]."² These assumptions include assuming that baseline and in-development four-hour batteries are unavailable to meet capacity needs in HE 23-24, excluding certain resources from the specified import list, derating geothermal resources, and assuming that in-development wind, geothermal, biomass, and biogas resources will not come online in September 2026 due to project delays.³ Cal Advocates' analysis suggests that with conservative supply assumptions, load-serving entities (LSEs) cannot meet a PRM greater than 20% at HE 23 in September 2026.⁴ Based on its analysis, Cal Advocates recommends the Commission retain a 17% PRM plus an "effective" PRM in 2026. Cal Advocates reasons that a lower PRM could help address potential challenges for LSEs in meeting requirements during nighttime hours, while also addressing cost concerns.⁵

The CAISO does not agree with Cal Advocates' approach to use a "worst-case" deterministic view of two hours in a single day to justify adopting a lower PRM across all hours

¹ American Clean Power – California Opening Comments, pp. 5-6; Independent Energy Producers Association, pp. 2-3; Western Power Trading Forum, pp. 2-5; Calpine Corporation Opening Comments, pp. 3-5; Microsoft Corporation Opening Comments, pp. 3-6; Clean Energy Buyers Association Opening Comments, pp. 2-7; Middle River Power LLC Opening Comments, p. 3.

² Cal Advocates Opening Comments, p. 4.

³ *Id.*, pp. 4-5.

⁴ Cal Advocates Opening Comments, p. 6.

⁵ *Id.*

of the year. The PRM should cover uncertainty and risks across the year. The Commission should not determine the PRM by applying “worst-case” conditions to a narrow subset of hours and reduce a PRM value that meets a 0.1 LOLE across the year. The CAISO is concerned that Cal Advocates’ approach introduces significant reliability risks across the rest of the year.

C. The CAISO Disagrees with the California Environmental Justice Alliance (CEJA) that the Commission Should Adopt a Lower PRM Because of the Availability of Emergency Supply.

In opening comments, the California Environmental Justice Alliance (CEJA) states, “While parties, including CEJA, have disagreed with not including the SRR in the RA calculation, here, at the very least, they provide an additional reason to choose a lower PRM.”⁶ The CAISO disagrees with CEJA’s statement. The Energy Division correctly excludes emergency and strategic reliability reserve (SRR) resources from its LOLE study, and the Commission should not consider these emergency resources as providing additional cushion for a lower PRM.

It would be inappropriate to use SRR resources to backfill meeting a 0.1 LOLE in the RA program. The SRR was designed to address “extreme events,” which include an “event occurring at a time and place in which weather, climate, or environmental conditions, including temperature, precipitation, drought, fire, or flooding, present a level of risk that would constitute or exceed a one-in-ten event, as referred to by the North American Electric Reliability Corporation, including when forecast in advance by a load-serving entity or local publicly owned electric utility.”⁷ In other words, the SRR is only used to support grid operations during extreme events or grid emergencies. It is intended to help maintain grid reliability beyond 1-in-10 events, which the RA program should cover. Additionally, unlike RA resources, SRR resources do not regularly submit offers in the CAISO market, and they are not subject to the same availability rules as RA resources. Therefore, the SRR is not a substitute for RA capacity that is subject to must-offer obligations and regularly available to the CAISO market. Accordingly, SRR resources are not a suitable substitute for RA capacity. The Commission should not use the SRR to justify PRM levels below the level needed to meet a 0.1 LOLE.

⁶ CEJA Opening Comments, p. 4.

⁷ Assembly Bill No. 205:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB205.

D. The CAISO Disagrees with SCE's and PCF's Recommendations that the Commission Adopt a 17% PRM with no "Effective" PRM for 2026.

In opening comments, both SCE and PCF recommend the Commission adopt a 17% PRM for 2026 with no "effective" PRM.⁸ Based on Energy Division analysis, a 17% PRM is far below the level needed to meet a 0.1 LOLE target.⁹

SCE states it conducted its own LOLE study that shows a 17% PRM is sufficient to achieve a 0.1 LOLE target in 2026.¹⁰ However, SCE does not provide work papers or details of its LOLE study for parties to evaluate. SCE did not submit its LOLE study with its Track 3 proposals, nor did SCE discuss its study in Track 3 workshops. Thus, parties had no opportunity to review or provide feedback on SCE's analysis and recommendation in this track of the proceeding. As such, the Commission should not rely on the results of SCE's study in determining the PRM for 2026.

The CAISO also disagrees with PCF's PRM recommendation for 2026. PCF states, "Adopting a PRM of 17 percent with no "effective PRM" will ensure that the Commission can minimize costs for consumers while maintaining reliability."¹¹ However, PCF provides no evidence to prove a 17% PRM on its own is sufficient to meet reliability. PCF also states, "The Commission should not adopt either of Energy Division's recent PRM proposals and instead should maintain a PRM of 17 percent, and eliminate the effective PRM requirements, because Energy Division has not demonstrated that a PRM above 17 percent is necessary to maintain reliability." To the contrary, Energy Division's most recent LOLE analysis suggests at least a 21% PRM in June through October and at least a 20% PRM in other months is required to meet a 0.1 LOLE in 2026.¹²

⁸ SCE Opening Comments, p. 4; PCF Opening Comments, p. 4.

⁹ See *Administrative Law Judge's Ruling on Energy Division's Hour Offset Workshop Slides and Load Migration Update*, February 25, 2025, Attachment 2.

¹⁰ SCE Opening Comments, p. 6.

¹¹ PCF Opening Comments, p. 5.

¹² *Administrative Law Judge's Ruling on Energy Division's Hour Offset Workshop Slides and Load Migration Update*, February 25, 2025, Attachment 2, Slide 11.

E. PCF's Statements About CAISO's Outage Data and RAAIM are Inaccurate.

In opening comments, PCF states, "The Commission should address two key problems created by the CAISO's approach—its failure to provide thorough publicly available data on all plant outages and failures to run when called and its proposal to pay additional ratepayer money to coax plants to run—called 'RAAIM incentives.'"¹³ PCF's characterization of CAISO's outage data and RAAIM is inaccurate. First, the CAISO makes outage data for generation facilities publicly available a day after the operating day.¹⁴ Second, the CAISO does not have an active RAAIM proposal. If PCF refers to the CAISO's existing RAAIM framework, then PCF's characterization is inaccurate. PCF suggests that RAAIM is a payment from ratepayers to incentivize generators to run. However, the RAAIM framework is a *self-funded* mechanism that compensates RA resources with high availability through charges applied to resources with low availability. RAAIM is not funded by ratepayers; it is self-funded by RA resources.

F. The Commission Should Hold Additional Discussion on Multi-Day Reliability Events and Long-Duration Storage Accreditation Under SOD.

In Track 3, Form Energy, Inc. (Form) and Hydrostor, Inc. (Hydrostor) submitted various proposals on accreditation and counting of multi-day storage (MDS) resources under the SOD framework. In opening comments, Form, Hydrostor, and Pacific Gas and Electric Company recommend the Commission pursue further reforms and discussion to account for multi-day reliability needs and long-duration storage accreditation under the SOD framework.¹⁵ The CAISO agrees with parties that future tracks of the RA proceeding need discussion on multi-day reliability needs and accreditation of MDS resources under the SOD framework. The Commission should ensure the RA program meets reliability needs across critical operational periods, including under multiple-day extreme weather and load conditions.

III. Conclusion

The CAISO appreciates the opportunity to provide reply comments on Track

¹³ PCF Opening Comments, p. 13.

¹⁴ See CAISO outage reports: <https://www.caiso.com/market-operations/outages/curtailed-and-non-operational-generators>.

¹⁵ Hydrostor Opening Comments, p. 7; Form Opening Comments, p. 7; PG&E Opening Comments, p. 6.

3 Proposals.

Respectfully submitted,

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