

**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

**OPENING COMMENTS OF THE  
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION  
ON THE PROPOSED DECISION ON TRACK 2 ISSUES**

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**I. Introduction**

Pursuant to Rule 14.3 of the California Public Utilities Commission’s (Commission) Rules of Practice and Procedure, the California Independent System Operator Corporation (CAISO) submits opening comments on the October 29, 2024 *Proposed Decision on Track 2 Issues* (PD).

The CAISO’s comments focus on supporting the aspects of the PD that ensure resource adequacy (RA) program requirements meet a 0.1 loss of load expectation (LOLE). Specifically, the Commission should maintain course to adopt a 2026 planning reserve margin (PRM) that meets a 0.1 LOLE. The Commission should also maintain the 0.1 LOLE reliability target as the reliability standard the Commission uses in RA LOLE modeling going forward. The Commission should establish a regular cadence for performing LOLE studies, as key assumptions in these studies may change significantly year over year, impacting PRM calculations. For the 2026 RA program year and beyond, the Commission should consider whether it is prudent to analyze PRM levels based on annual LOLE studies. Finally, the Commission should perform stress tests as part of the 2026 and future LOLE studies.

The CAISO also comments on other issues addressed in the PD. The CAISO supports the PD’s direction to develop an unforced capacity (UCAP) framework in coordination with the CAISO. The CAISO stands ready to support the Commission in the development of a UCAP framework by sharing and helping analyze publicly available forced outage data. To facilitate

UCAP coordination with the CAISO, the Commission should remain flexible regarding specific details of a UCAP framework at this time. The Commission should enable this flexibility by revising the PD to clarify it is not prescribing specific Track 3 proposal details in this PD. Finally, the CAISO supports the PD's determination to retain local requirements.

## **II. Discussion**

### **A. The Commission Should Maintain Course to Adopt a PRM for 2026 that Meets a 0.1 LOLE.**

The PD authorizes Energy Division staff to revise the 2026 PRM analysis and seek party feedback on the revised study results.<sup>1</sup> To allow for further consideration of the revised results, the PD defers Commission consideration of the 2026 PRM to Track 3 of this proceeding.

The CAISO supports the PD's recommendation, but urges the Commission to maintain course to adopt a PRM for 2026 that is tested to meet a 0.1 LOLE across the year. Several parties requested that the Commission allow more time for parties to review and understand Energy Division study results. Allowing parties additional time to review the revised results will help ensure parties gain understanding and comfortability with study results. However, deferring the Commission's consideration of the 2026 PRM to Track 3 of this proceeding should not prevent the Commission from adopting a PRM that meets a 0.1 LOLE for the 2026 RA year. As explained further below, adopting a PRM that meets a 0.1 LOLE target helps ensure RA requirements reflect the resources necessary to maintain reliability.

### **B. The Commission Should Maintain a 0.1 LOLE as the Reliability Target for the RA Program.**

The PD affirms that "[t]he 0.1 LOLE reliability standard is currently used by Energy Division in the RA LOLE modeling and we plan to continue to use that standard going forward."<sup>2</sup> The CAISO supports the Commission's commitment to continue to use the 0.1 LOLE reliability target in RA LOLE modeling.

The Commission should maintain a 0.1 LOLE as the reliability target for its RA program for several reasons. First, a 0.1 LOLE reliability target is an industry-accepted measure of supply sufficiency and can help prevent capacity shortfalls. Second, a 0.1 LOLE reliability

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<sup>1</sup> PD, p. 11.

<sup>2</sup> *Id.*, p. 19.

target better aligns RA requirements with resource planning in the Integrated Resource Planning (IRP) proceeding. In Decision (D.) 24-02-047, the Commission adopted a 0.1 LOLE as part of the IRP reliability framework to determine resource needs.<sup>3</sup> Aligning the reliability targets in the IRP and RA proceedings ensures that nearer-term requirements established in the Commission’s RA program meet the same level of reliability set in the IRP process.

**C. The Commission Should Adopt a Regular Cadence for Energy Division to Perform LOLE Studies to Set the PRM in the RA Program.**

**1. Performing LOLE Studies Regularly Allows Energy Division to Account for Changing System Conditions.**

The PD establishes a regular cadence for LOLE studies in the RA proceeding by authorizing Energy Division staff to perform such studies once every two years.<sup>4</sup>

The CAISO supports a regular cadence for performing LOLE studies because it will allow Energy Division to update the inputs and assumptions that can materially affect the calculation of the PRM. LOLE studies and PRM analyses rely on inputs that change regularly and can affect the results of the LOLE study and PRM calculation. Such inputs include the California Energy Commission’s (CEC) demand forecast, RA counting rules, assumptions about hydro conditions, and assumptions about new resources on the CAISO system.

Regularly performing LOLE studies with updated inputs and assumptions will help ensure Energy Division studies account for shifts in key LOLE study inputs. In turn, annual, updated LOLE studies will ensure the Commission adopts PRMs that account for changing system conditions.

**2. The Commission Should Consider Whether Performing Annual LOLE Studies and PRM Analyses is Preferable in Future Years.**

The PD states that performing LOLE studies once every two years, as opposed to performing studies annually, is reasonable because of the amount of work and time required to gather data and establish inputs and assumptions.<sup>5</sup> The PD also acknowledges that Energy

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<sup>3</sup> D. 24-02-047, p. 110:

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M525/K918/525918033.PDF>.

<sup>4</sup> PD, p. 17.

<sup>5</sup> PD, p. 17.

Division staff is gaining experience with the LOLE study development process and will refine the modeling timelines.<sup>6</sup>

The CAISO acknowledges that LOLE studies require a significant amount of time and effort. At the same time, Energy Division may streamline its study processes over time as Energy Division gains experience regularly performing LOLE studies. For example, the most recent LOLE study for 2026 includes a step where Energy Division translates the LOLE study results into a PRM that is calibrated for the CPUC's Slice of Day framework.<sup>7</sup> The process of Energy Division staff reviewing this PRM calibration methodology with parties began with the initial LOLE Study in July 2024 and is still ongoing.<sup>8</sup> However, as parties achieve consensus on this PRM calibration methodology, Energy Division staff may be able to abbreviate the PRM analysis process.

If it is feasible for Energy Division to shorten the LOLE study schedule over time, the Commission should consider whether it is prudent to analyze PRM levels based on LOLE studies annually. An annual cadence could allow LOLE study and PRM analysis results to reflect annual changes in key inputs and assumptions, such as the CEC's demand forecast and hydro conditions. Utilizing the most current inputs and assumptions will increase study accuracy and RA program reliability.

An annual cadence could also allow Energy Division to align the demand forecast used in the LOLE study with the demand forecast used to set RA requirements for a given year. This will result in alignment between load shapes used to set RA requirements and load shapes used in Energy Division's LOLE studies. Alignment is particularly important if forecasted load shapes change significantly across years, as LOLE studies and PRM calculations rely on a dispatch of resources to meet forecasted load shapes. Alignment between load shapes used in LOLE studies and load shapes used to set RA requirements best ensure the PRM (or PRMs) calculated remain appropriate for hourly RA requirements in a given year.

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<sup>6</sup> *Id.*, p. 18.

<sup>7</sup> Energy Division, *Appendix A to Loss of Load Expectation Study for 2026: Revised Slice of Day Tool Analysis*, August 30, 2024: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M539/K203/539203368.PDF>

<sup>8</sup> Energy Division, *Loss of Load Expectation Study for 2026 Including Slice of Day Tool Analysis*, July 19, 2024: <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M536/K273/536273741.PDF>

**D. The Commission Should Adopt Stress Testing as a Formal Part of the Process to Set the PRM.**

The PD notes that Energy Division staff performed a stress test as part of the 2026 LOLE study and directs Energy Division staff to perform a similar stress test in future RA LOLE studies.<sup>9</sup> The PD also acknowledges that stress tests may be necessary to establish the suitability of a single annual PRM or multiple PRMs.<sup>10</sup>

The CAISO supports the PD’s direction that Energy Division perform stress tests as part of the 2026 and future LOLE studies. Stress testing is critical to confirm the PRM (or PRMs) selected will result in RA requirements that produce a reliable RA portfolio across the year. Over the past two years, Energy Division and other parties have consistently demonstrated that stress testing is essential to: (1) understand whether a single annual PRM is sufficient to meet a 0.1 LOLE across the year; and (2) understand whether the PRM (or multiple PRMs) selected meets a 0.1 LOLE across the year.<sup>11</sup>

The PD also affirms that a 0.1 LOLE is the Commission’s reliability target for the RA program and stress test testing ensures that the resulting PRM achieves this target.<sup>12</sup> The CAISO supports this determination.

**E. The Commission Should Coordinate with the CAISO to Develop a UCAP Framework.**

**1. The CAISO Stands Ready to Support the Commission in the Development of a UCAP Framework.**

The PD directs Energy Division staff to coordinate with the CAISO to develop a UCAP framework and submit this proposal into Track 3 of this proceeding.<sup>13</sup> As part of this

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<sup>9</sup> PD, p. 19.

<sup>10</sup> *Id.*

<sup>11</sup> For example, Energy Division’s most recent LOLE study and PRM stress testing led Energy Division to recommend two different PRMs across the year for 2026 to meet a 0.1 LOLE target.

See also Energy Division, *Slice of Day – Load Forecast Process Update and Loss of Load Studies Translation for RA Proceeding Update*, October 6, 2022: [https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/resource-adequacy-compliance-materials/resource-adequacy-history/10-6-2022-wrap-up/workshop-10\\_energy-division\\_221006.pdf](https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/resource-adequacy-compliance-materials/resource-adequacy-history/10-6-2022-wrap-up/workshop-10_energy-division_221006.pdf)

Western Power Trading Forum, *Opening Comments on Track 1 Proposals*, March 22, 2024, p. 2.

<sup>12</sup> PD, p. 19.

<sup>13</sup> *Id.*, p. 21.

coordination, the PD encourages Energy Division to coordinate with the CAISO on the development of outage data sharing and analysis procedures.<sup>14</sup>

The CAISO stands ready to support the Commission in the development of a UCAP framework by sharing and helping analyze publicly available forced outage data. In Track 1 of this proceeding, Energy Division proposed to use data derived from CAISO’s Outage Management System (OMS) as a data source for its UCAP framework.<sup>15</sup> The CAISO is committed to supporting Energy Division in the extraction, processing, and summarizing of data derived from OMS to assist in the development of a UCAP framework.

## **2. The Commission Should Not Prescribe Specific Details of a UCAP Framework at this Time.**

The PD specifies UCAP design elements that Energy Division staff should include in its proposal for a UCAP framework. For example, the PD states that Energy Division should develop a UCAP framework “for thermal power plants and battery electric storage systems.”<sup>16</sup>

The Commission should remain flexible regarding specific details of a UCAP framework at this time. Specifically, the Commission should revise the PD to clarify it is not prescribing specific Track 3 proposal details in this PD. The Commission should also revise the PD to acknowledge that design details may evolve as Energy Division develops a UCAP proposal in Track 3 and works in coordination with the CAISO’s RA stakeholder process.

The CAISO’s own stakeholder process to consider a UCAP framework for establishing net qualifying capacity is underway.<sup>17</sup> The CAISO does not expect to complete this stakeholder process before the end of the second quarter of 2025.<sup>18</sup> By remaining flexible with the specific design elements of a UCAP framework at this time, the Commission will allow for greater harmonization with a potential UCAP proposal developed through CAISO’s stakeholder process.

The CAISO recognizes that the Commission and other local regulatory authorities (LRAs) are key partners in the development of a UCAP design. A successful UCAP

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<sup>14</sup> PD, p. 23.

<sup>15</sup> *Id.*, p. 14.

<sup>16</sup> *Id.*, p. 21.

<sup>17</sup> CAISO, *Resource Adequacy Issue Paper*, November 7, 2024: <https://stakeholdercenter.caiso.com/InitiativeDocuments/Issue-Paper-Resource-Adequacy-Modeling-and-Program-Design-Nov-07-2024.pdf>

<sup>18</sup> CAISO, *California ISO Draft Policy Initiatives Roadmap*, November 12, 2024: <https://stakeholdercenter.caiso.com/InitiativeDocuments/2024-Draft-Policy-Initiatives-Roadmap.xlsx>



development process should consider the RA programs administered by the Commission and other LRAs as well as CAISO's RA processes. This will ensure that the incentives and resource counting rules reflected in the Commission's UCAP proposal work in concert with the CAISO's RA processes, making the Commission's proposal more feasible and practical to implement. The CAISO encourages Energy Division staff and other LRAs to develop jointly a UCAP framework that aligns with the various LRA RA program designs and CAISO's RA processes. To best synchronize Energy Division's Track 3 proposal with the timing of UCAP discussions in the CAISO's stakeholder process, the Commission should signal more flexibility regarding UCAP design details and allow conversations to evolve in both venues.

The Commission should revise the PD to clarify it is not prescribing specific Track 3 proposal details in this PD. The Commission should also revise the PD to acknowledge that design details may evolve as UCAP discussions develop in this proceeding and the CAISO's stakeholder process. The CAISO will work closely with Energy Division staff to best align any potential UCAP framework between the CAISO's and Commission's RA processes.

#### **F. The Commission Should Not Eliminate Local Requirements.**

The CAISO supports the PD's determination to retain local requirements.<sup>19</sup> The PD states, "we agree that system RA requirements alone cannot target local reliability areas with the same granularity as local RA requirements, and thus cannot ensure that sufficient resources are procured in local areas."<sup>20</sup> The CAISO agrees with the Commission's conclusions.

As stated in CAISO's past comments:

System requirements only consider whether sufficient resources exist to meet requirements for the entire CAISO footprint; system requirements do not function with enough geographic granularity to ensure sufficient resources are available in local capacity areas. Local requirements are necessary to ensure that reliability needs in local areas are met. Continuing to enforce full local requirements is critical to maintaining reliability. Enforcing full local requirements is also important to encourage new development in local areas requiring additional capacity.<sup>21</sup>

For these reasons, the Commission should not eliminate local requirements.

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<sup>19</sup> PD, p. 27.

<sup>20</sup> *Id.*, p. 26.

<sup>21</sup> Opening Comments of CAISO on Track 2 Proposals, p. 7.

### III. Conclusion

The CAISO appreciates the opportunity to provide opening comments on the PD, and the CAISO requests the Commission adopt the recommendations proposed herein.

Respectfully submitted

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