

**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 PROPOSED DECISION ADOPTING LOCAL CAPACITY OBLIGATIONS FOR  
2025-2027, FLEXIBLE CAPACITY OBLIGATIONS FOR 2025, AND PROGRAM  
REFINEMENTS**

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Dated: June 6, 2024

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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 comments on the May 17, 2024 *Proposed Decision Adopting Local Capacity Obligations for 2025-2027, Flexible Capacity Obligations for 2025, and Program Refinements* (PD).

The CAISO’s comments focus primarily on the planning reserve margin (PRM) for 2025 and the general process for setting the PRM under the resource adequacy (RA) program. For the 2025 RA compliance year, the Commission should not reduce the 17% PRM or eliminate the “effective” PRM procurement requirement. The Commission should also clarify that the previously adopted “effective” PRM remains for 2025. In Track 2, the Commission should prioritize developing a process to set the PRM in the RA program to meet a 0.1 loss of load expectation (LOLE). For compliance years 2026 and beyond, the Commission should prioritize development of a process to set the PRM under the Slice of Day (SOD) framework. As part of this development process, the Commission should establish a method to stress test the PRM and consider adopting multiple PRMs across the year, rather than a single annual PRM. Finally, the Commission should commit to monitoring the performance of the SOD framework during the remainder of the 2024 SOD test year and throughout 2025, and the Commission should be

prepared to correct quickly any deficiencies in the SOD design that could adversely affect grid reliability in the 2025 RA year.

The CAISO also comments on other issues addressed in the PD. First, the Commission should not adopt measures that, in aggregate, could erode RA requirements, such as the allocation of Strategic Reliability Reserve (SRR) to Commission-jurisdictional load serving entities (LSEs) to count towards RA requirements. Second, the CAISO supports the Bonneville Power Administration's (BPA) import RA proposal, which could unlock additional reliable import supply and help alleviate tight capacity market conditions in California. The Commission should also adopt clarifications to showing requirements for solar and wind import resources, and the Commission should require that all deliverable resources shown to the Commission also be shown to the CAISO. The Commission should not adopt rules that allow entities to show off-peak imports in SOD showings at this time, as this proposal is underdeveloped. Finally, the Commission should adopt local capacity requirements (LCR) for 2025-2027 and 2025 flexible capacity requirements (FCR).

## **II. Discussion**

### **A. The Commission Should Retain at Least a 17% PRM and the “Effective” PRM Adopted in D.23-06-029 for 2025.**

The PD retains a 17% PRM for 2025.<sup>1</sup> Although CAISO has concerns about whether a 17% PRM for 2025 is high enough to ensure RA requirements meet a 0.1 LOLE, the CAISO ultimately does not support a PRM for 2025 lower than the 17% adopted in D.23-06-029.<sup>2</sup>

The PD recognizes a decrease in the California Energy Commission's 2023 Integrated Energy Policy Report (IEPR) demand forecast compared to prior years.<sup>3</sup> The 2023 IEPR demand forecast also predicts a shift in the CAISO system peak from September to July. The CAISO agrees with the PD that retaining a 17% PRM, rather than reducing the PRM, can help offset uncertainty with the lower 2023 IEPR demand forecast and changing peak loads.<sup>4</sup> As the PD concluded, reducing the PRM may introduce loss of load risk in months outside of

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<sup>1</sup> PD, p. 24.

<sup>2</sup> CAISO, Opening Comments on Decision Adopting Local Capacity Obligations for 2024-2026, Flexible Capacity Obligations for 2024, and Program Refinements, June 14, 2023, p. 2.

<sup>3</sup> PD, p. 23.

<sup>4</sup> *Id.*, pp. 23-24.

September. Further, as discussed in the section below, the Commission should retain the “effective” PRM for 2025 because there is no evidence to suggest that additional procurement under the “effective” PRM is unnecessary to ensure reliability of the RA program.<sup>5</sup>

**B. The Commission Should Clarify That the “Effective” PRM Adopted in D.23-06-029 Continues to Apply for 2025.**

The PD retains the 17% PRM adopted in D.23-06-029, however it does not mention the “effective” PRM adopted in the same Decision. The Commission should clarify that the “effective” PRM adopted in D.23-06-029 will remain in effect for 2025.

Although the CAISO continues to have concerns about retention of an “effective” PRM in the RA program, there is no evidence to suggest that additional procurement under the “effective” PRM is unnecessary to ensure reliability of the RA program. The Commission should not eliminate this additional procurement requirement until the Commission sets the PRM at a level tested to meet a 0.1 LOLE.

**C. In Track 2, the Commission Should Prioritize Developing the Process to Set the PRM in the RA Program.**

The CAISO continues to stress the importance of developing a process to set the PRM under the SOD framework that ensures RA program requirements meet a 0.1 LOLE across the year. The CAISO appreciates the significant discussion that has already occurred on this topic at the Commission. However, several critical issues remain undecided, including: (1) developing the process to stress test the PRM to ensure RA requirements meet a 0.1 LOLE; and (2) considering multiple PRM values across the year. Accordingly, the Commission should prioritize development of the process to set the PRM in the RA program in Track 2 of this proceeding.

**1. The Commission Should Adopt a Process to Stress Test the PRM.**

The CAISO’s Track 1 proposal recommended the Commission formally adopt a process to stress test the PRM in the RA program to ensure the PRM produces RA requirements that

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<sup>5</sup> PD, p. 23.

meet a 0.1 LOLE.<sup>6</sup> In Track 1, other parties submitted similar proposals and supported adopting a PRM stress testing process.<sup>7</sup>

The CAISO continues to recommend the Commission adopt a PRM stress testing process to confirm that the PRM results in RA requirements that achieve a 0.1 LOLE across the year. A 0.1 LOLE reliability target is an industry-accepted measure of supply sufficiency and can help prevent capacity shortfalls. The Commission should adopt stress testing as a formal part of the process to set the RA PRM in Track 2.

## **2. The Commission Should Consider Multiple PRMs Across the Year.**

American Clean Power Association – California’s (ACP) Track 1 proposal recommended the Commission consider multiple PRMs across the year given demonstrated shortcomings of a single annual PRM.<sup>8</sup> Energy Division and Astrape analysis shows that a single annual PRM based on the peak load month of the year can lead to an LOLE as high as 0.4, well above the industry standard of 0.1 LOLE.<sup>9</sup> Western Power Trading Forum (WPTF) and Astrape also observed this same outcome in an analysis submitted with WPTF’s recent comments on Track 1 proposals.<sup>10</sup>

Multiple PRMs across the year may allow RA requirements to meet a 0.1 LOLE while ensuring LSE procurement remains feasible. The Commission should further explore whether applying multiple PRMs across the year can achieve a 0.1 LOLE while preventing any single month PRM and RA requirements from exceeding the planned resource portfolio.

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<sup>6</sup> CAISO, Track 1 Proposal, p. 1.

<sup>7</sup> ACP, Track 1 Proposal, R.23-10-011, January 19, 2024, pp. 5-6; WPTF, Track 1 Proposal, R. 23-10-011 January 19, 2024, p. 2.

<sup>8</sup> ACP, Track 1 Revised Proposals, R. 23-10-011, February 23, 2024, p. 3.

<sup>9</sup> 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)

<sup>10</sup> Reply Comments of CAISO on Track 1 Proposals, p. 2.

**D. The Commission Should Commit to Monitoring the Performance of the SOD Framework.**

The PD maintains 2025 as the first compliance year for the SOD framework.<sup>11</sup> SOD is a novel concept, and the PD acknowledges the SOD framework will likely face implementation challenges.<sup>12</sup> As such, the Commission should closely monitor the performance of the SOD framework during the remainder of the 2024 SOD test year, annual showings for 2025, and throughout 2025. The Commission should quickly address any issues with the SOD framework that may arise, particularly those that may adversely impact grid reliability.

Changes to core elements of the Commission's RA program also warrant careful monitoring of the SOD framework. SOD implementation in 2025 coincides with a 2025 IEPR demand forecast with significant shifts in the timing of the system peak as well as new SOD counting rules, including monthly exceedance values for solar and wind resources proposed in the PD. The Commission should monitor the interactions between the updated demand forecast, the new SOD counting rules, and the PRM as well as impacts on resulting RA portfolios for 2025. If the Commission finds that the combination of new counting rules, load profiles, and PRM are not sufficient to ensure the reliability of the RA fleet in 2025, the Commission should consider mitigation measures to quickly correct any SOD design deficiencies for the 2025 RA year.

**E. The Commission Should Not Adopt Measures that, in Aggregate, Could Erode RA Requirements.**

In prior comments, the CAISO raised concerns that several proposals submitted in Track 1 could, in aggregate, erode RA requirements.<sup>13</sup> The CAISO supports the PD's determination to not adopt such measures, including system waivers, allocating SRR resources as RA to LSEs, and reducing the PRM in the RA program.

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<sup>11</sup> PD, p. 17.

<sup>12</sup> PD, p. 17.

<sup>13</sup> Reply Comments of CAISO on Track 1 Proposals, p. 4.



**1. The Commission Should Not Allocate the Strategic Reliability Reserve to Commission-Jurisdictional LSEs to Count Towards RA Requirements.**

In prior comments, Pacific Gas and Electric Company (PG&E) proposed that the Commission should allocate the capacity of certain SRR resources to reduce RA requirements in response to high prices in the capacity market.<sup>14</sup>

The PD declines to adopt PG&E's proposal, reasoning that SRR resources are meant to address extreme events, not backfill RA requirements.<sup>15</sup> The CAISO supports the PD's conclusion.

**F. The CAISO Supports Continued Development of an Unforced Capacity Framework in Track 2.**

The PD does not adopt an Unforced Capacity (UCAP) framework, noting plans to further develop the UCAP framework in Track 2.<sup>16</sup> The CAISO agrees that additional discussion among parties on UCAP is needed before the Commission adopts a UCAP methodology.

The CAISO reiterates its commitment to working with Energy Division and parties to further evaluate a UCAP framework in this proceeding, in coordination with the CAISO's ongoing RA Modeling and Program Design working groups and stakeholder process.

**G. The Commission Should Adopt BPA's Import RA Proposal.**

In its Track 1 proposal, BPA requests that the Commission adopt a process for BPA to make several attestations to qualify BPA's non-resource-specific imports as resource-specific under the Commission's import RA rules.<sup>17</sup> To prevent "speculative" RA imports, BPA proposes that the Commission adopt rules that require the import RA capacity to have firm transmission to the CAISO balancing authority area (BAA).<sup>18</sup> BPA also proposes that the import provider provide an attestation that capacity behind import supply is not committed to also serve load outside of the CAISO BAA.<sup>19</sup>

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<sup>14</sup> Opening Comments of PG&E on Track 1 Proposals, p. 12.

<sup>15</sup> PD, p. 41.

<sup>16</sup> PD, p. 64.

<sup>17</sup> Track 1 Proposal of BPA, p. 4.

<sup>18</sup> BPA, Track 1 Proposal, p. 4

<sup>19</sup> *Id.*

The PD adopts BPA’s Track 1 proposal with modifications. To qualify for treatment as a resource-specific import, the Commission will require LSEs contracting for non-resource-specific imports to file an affidavit with a series attestations from the import provider, largely consistent with BPA’s proposal. The PD also requires LSEs to attest to the following: (1) import resources will submit bids into the CAISO markets at certain times; and (2) import energy will be given equal curtailment priority as the LSEs’ native load.<sup>20</sup> Specifically, the PD requires LSEs to attest that “the energy will be economically bid into the CAISO day-ahead and real-time markets at least during the Availability Assessment Hours every Monday through Saturday, throughout the RA compliance month.”<sup>21</sup> To ensure these imports have the same bidding obligation as resource-specific imports, the Commission should clarify that LSEs must economically bid the energy in alignment with CAISO must-offer obligation rules for resource-specific imports.

As stated in prior comments, the CAISO supports BPA’s proposal because it could unlock additional reliable import supply, potentially alleviating tight capacity market conditions in California.<sup>22</sup>

#### **H. The Commission Should Adopt Measures in the PD That Support Alignment Between the Commission’s RA Processes and the CAISO’s RA Processes.**

##### **1. The CAISO Recommends Additional Clarification Regarding Showing Requirements for Resource-Specific Solar and Wind Import Resources.**

In its Track 1 proposal, PG&E requests that the Commission clarify how resource-specific solar and wind imports should be paired with import allocation rights under the SOD framework.<sup>23</sup> The PD clarifies that an LSE is required to have import allocation rights equal to the RA capacity shown to the Commission unless that value is zero MW at the peak hour, in which case the LSE should have allocation rights equal to the minimum value of 0.01 MW.<sup>24</sup> The Commission should clarify additionally that LSEs should have import allocation rights equal to their RA showing value for a specific resource. The Commission should also clarify that,

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<sup>20</sup> PD, p. 59.

<sup>21</sup> PD, p. 59.

<sup>22</sup> CAISO, Opening Comments on Track 1 Proposals, p. 7.

<sup>23</sup> Track 1 Proposals of PG&E, p. 7.

<sup>24</sup> PD, p. 54.

consistent with CAISO’s guidance from earlier this year, that “[i]f the monthly coincident peak hour exceedance value is zero, then the QC value passed to the CAISO is 0.1 MW (greater of monthly coincident peak value and 0.1 MW).”<sup>25</sup> Thus, if the LSE shows the full resource in this case, the LSE should have import allocation rights equal to 0.1 MW. These clarifications will support alignment between the Commission’s RA processes and the CAISO’s RA processes.

## **2. The Commission Should Require that All Deliverable Resources Shown to the Commission Also Be Shown to the CAISO.**

In the CAISO’s revised Track 1 proposal, the CAISO proposed the Commission adopt a rule requiring LSEs to show all deliverable resources on SOD RA plans to the CAISO.<sup>26</sup> This transparency would allow the CAISO to identify RA resources in CAISO systems and processes correctly. Correct identification of RA resources helps ensure resources are subject to CAISO RA rules and that the CAISO accounts for these resources for RA compliance. Compliance with CAISO RA rules (such as must-offer obligations, substitution rules, and the resource adequacy availability incentive mechanism) is important to ensure resources are available to the CAISO when needed for reliability.

The PD adopts the CAISO’s proposal.<sup>27</sup> For the foregoing reasons, the Commission should adopt this rule.

### **I. The Commission Should Not Allow Entities to Show Off-Peak Imports in SOD Showings at this Time.**

In its Track 1 proposal, Southern California Edison Company (SCE) proposes to allow LSEs to count off-peak imports towards the Commission’s RA requirements under SOD.<sup>28</sup>

The PD declines to adopt SCE’s proposal at this time, reasoning that it is unclear how an off-peak product would interact with existing RA rules including must offer obligations, bid insertion, and maximum import capability. The CAISO supports the PD’s determination.<sup>29</sup> Under CAISO’s RA processes, RA resources are subject to a must offer obligation, which

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<sup>25</sup> CAISO, CAISO RA processes and CPUC’s Slice of Day, January 2024, p.2: <https://stakeholdercenter.caiso.com/InitiativeDocuments/White-Paper-ResourceAdequacyProcesses-CPUC-Slice-of-Day-Jan09-2024.pdf>

<sup>26</sup> Track 1 Proposal of CAISO, p. 1. Deliverable resources include resources with full or partial deliverability status and exclude energy-only resources.

<sup>27</sup> PD, p. 69.

<sup>28</sup> Track 1 Proposal of SCE, p. 7.

<sup>29</sup> PD, p. 55.

includes requirements to bid or self-schedule during peak hours. If resources do not submit bids to the CAISO, they may be subject to bid insertion. Further, for imports to count as RA capacity, imports must be paired with maximum import capability. The CAISO agrees with the PD that the proposal requires additional discussion before moving forward.

**J. The Commission Should Adopt the 2025-2027 Local Capacity Requirements and 2025 Flexible Capacity Requirements.**

The PD adopts the local capacity requirements the CAISO provided in its Final 2025-2027 LCR Report.<sup>30</sup> The PD also adopts the flexible capacity needs identified in the CAISO's Final 2024 FCR Report.<sup>31</sup> The CAISO supports these aspects of the PD and appreciates the Commission's recognition of the analysis the CAISO conducted to support these measures.

**III. Conclusion**

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

Respectfully submitted

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Dated: June 6, 2024

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<sup>30</sup> PD, p. 9.

<sup>31</sup> PD, p. 11.