

**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 21-10-002
(Filed October 7, 2021)

**NOTICE OF EX PARTE COMMUNICATION BY
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

Pursuant to Rule 8.2 of the California Public Utilities Commission (Commission) Rules of Practice and Procedure, the California Independent System Operator Corporation (CAISO) hereby files this notice of written ex parte communications in the above captioned proceeding.

On June 9, 2022, the CAISO sent the attached letter to President Alice Busching Reynolds and Commissioners Clifford Rechtschaffen, Genevieve Shiroma, Darcie L. Houck, and John Reynolds.

Respectfully submitted

By: /s/ David Zlotlow

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Dated: June 9, 2022

Elliot E. Mainzer
President & Chief Executive Officer

Transmitted Electronically

June 9, 2022

Honorable Alice Reynolds, President
Honorable Debbie Chiv, Administrative Law Judge
Honorable Shannon O'Rourke, Administrative Law Judge
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, California 94102

Re: Proposed Decision in Rulemaking 21-10-002

Dear President Reynolds, Judge Chiv, and Judge O'Rourke:

The proposed decision in the Resource Adequacy Reform Track correctly recognizes the need to evolve California's resource adequacy program to address new demand patterns and the transition of resources occurring on our power system. The California Independent System Operator Corporation (ISO) is committed to continue to work with you and others to strengthen California's resource adequacy program as we evolve our respective frameworks to meet the state's reliability needs. In our new 5-Year Strategic Plan, we lay out what the ISO must do over the next five years to strengthen reliability today while keeping California on the path to the clean, reliable grid of the future. Item 2 of our strategic plan focuses on resource adequacy, where we commit to "sharpen the ISO's resource adequacy strategy and clarify priorities for engagement in CPUC and California Energy Commission (CEC) policy processes."

Collectively, we share the task of ensuring a safe, reliable, and efficient resource adequacy paradigm, which calls for thoughtful planning and effective coordination to achieve these objectives. To this end, I ask all of us to take the necessary next steps to address the many questions that must be resolved to get us where we need to go as we detail an analytically rigorous, clear, and transparent process to meet the resource adequacy needs for California.

The proposed decision recognizes the importance of assessing the electricity demand needs as well as the resource capabilities across all hours of the day. Our increased reliance on resources with limited availability makes this issue paramount from a planning perspective. This will require us to develop clear and consistent rules across all stages of the resource adequacy program to meet both energy and capacity needs.

The proposed decision also recognizes that the 24-hour slice approach, which has not been employed elsewhere, requires significant effort in the upcoming months to complete the design and related procedures prior to deployment. As we engage into this critical phase, we must strive to achieve a reliable resource adequacy program based on straight forward and clear rules that is operable and comparable both with other components of California resource adequacy mechanisms and with the greater market for resource adequacy in the Western interconnection.

A critical element of a well-functioning, efficient, and reliable resource adequacy construct is the careful evaluation of the planning questions through a logical sequencing of analytical steps, employing state-of-the-art modeling techniques. In the coming months, we look forward to working with the Commission and others to consider enhancements to these planning targets.

Honorable Alice Reynolds
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The resource adequacy fleet should meet a planning reserve margin established on a reliability-based assessment (i.e., a loss of load expectation of 0.1 days/year). This includes meeting reliability needs across all critical operational periods, including multiple-day, high-load conditions and other risks posed by climate change. This analysis will need to identify the overall portfolio effects of resource additions and contracting decisions to understand how to achieve reliable supply and cost efficiencies. At this time it is not entirely clear how the slice-of-day approach enhances or works with the current planning paradigms and it is critical that the discussions and analyses in the upcoming workshops crucially evaluate this question.

Also critical to a well-functioning, efficient, and reliable resource adequacy program is the development of rational capacity counting rules that reflect the contribution resources make to reliability as well as the reliability risks of allowing one resource type to overwhelm resource adequacy supply. Incorporating these disparate components into a holistic process that is clear and transparent is important to ensure we shape resource portfolios to meet reliability requirements and inform future procurement decisions to maintain affordability

Any resource adequacy construct should also ensure buyers and sellers can efficiently and economically contract for resource adequacy supply with commercially viable options to ensure rational compliance with the planning targets. In the months ahead, it will be important to evaluate design elements of the 24-hour slice proposal in this context to ensure we can achieve an integrated and fully operable program. Finally, as California continues to be integrated in the greater Western interconnection market for resource adequacy support, we must strive for a seamless interaction with resource adequacy programs across the Western region.

In the immediate future, the ISO will work with Commission staff and all parties to address the issues the proposed decision identifies for the Reform Track Phase 2 workshops. Ensuring that compliance tools, resource adequacy counting rules, and the planning reserve margin work together is critical to achieve the objectives identified in the proposed decision. The ISO will also ensure our stakeholder processes are as efficient and timely as possible to explore modifications to our tariff rules as appropriate.

Again, I reiterate our commitment to work with all entities to evolve California's resource adequacy program so it can meet our shared goal of a reliable, cost-effective and environmentally sustainable power system and look forward to our continuing collaboration in this process.

Respectfully submitted,



Elliot Mainzer
President and Chief Executive Officer

Cc: Commissioner Darcie Houck
Commissioner Cliff Rechtschaffen
Commissioner John Reynolds
Commissioner Genevieve Shiroma
Service List Rulemaking 21-10-002

**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 21-10-002
(Filed October 7, 2021)

**COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION ON THE ADMINISTRATIVE LAW JUDGES' PROPOSED
DECISION**

I. Introduction

The California Independent System Operator Corporation (CAISO) submits these comments on Administrative Law Judges Chiv and O'Rourke's proposed decision (PD), issued on May 20, 2022.

The CAISO appreciates the work Energy Division staff, parties, and the Commission have expended to develop the record leading to this important PD. The PD correctly recognizes the need to evolve California's resource adequacy (RA) program to address new demand patterns and the resource transition to meet a clean energy future. The CAISO will continue to work with the Commission and parties to strengthen California's RA program as the state pursues its climate objectives.

The CAISO looks forward to working with Energy Division staff and parties to address the issues the PD identifies for the Reform Track Phase 2 workshops. Ensuring that compliance tools, RA counting rules, and the planning reserve margin (PRM) work together is critical to achieve the objectives identified in the PD.

Besides comments on the proposed 24-hour slice framework, the CAISO provides supportive comments on the PD's direction to: (1) adopt the 2023-2025 local capacity requirements; (2) adopt the 2023 flexible capacity requirements; (3) adopt the CAISO's 2023 availability assessment hours with commensurate change in the maximum cumulative capacity bucket structure; (4) increase the PRM for 2023 and 2024; (5) update the effective load carrying capability values for wind and solar; (6) provide an opportunity to implement an interim demand response counting methodology; and (7) decline adoption of RA capacity values for behind-the-meter resources at this time.

II. Discussion

A. 24-Hour Slice Framework

This RA proceeding and the PD vetted several approaches to reforming the RA program's structure and concluded that the 24-hour slice proposal, advocated by Southern California Edison Co. (SCE), represented the best approach.¹ Under this approach, each load serving entity would have to "demonstrate that it has enough capacity to satisfy its specific gross load profile, including PRM, in all 24 hours on CAISO's 'worst day' in that month."² The PD acknowledges concerns about implementation complexities and accordingly makes the 2024 RA year a "test year" to allow for further resolution of outstanding issues.³

¹ Cal. Pub. Util. Comm'n, *Proposed Decision Adopting Local Capacity Obligations for 2023-2025, Flexible Capacity Obligations for 2023, and Reform Track Framework*, at 76, Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Reforms and Refinements, and Establish Forward Resource Adequacy Obligations, R.21-10-002, May 20, 2022 (PD).

² *Id.* at 57.

³ *Id.* at 76.

The CAISO agrees with the Commission’s five key principles used to guide the reform track.⁴ The principles dovetail well with major program attributes, summarized below, the CAISO considers critical to ensuring an effective RA program.⁵

1. The ability to ensure a reliable RA fleet meets a PRM based on a well-vetted reliability-based assessment (*e.g.*, a fleet that can meet a 0.1 loss of load expectation). This includes meeting reliability needs across critical operational periods, under multiple day high-load conditions, and other climate change-driven risks/events.
2. Ensure load serving entities (LSEs) show and offer to the CAISO sufficient resources with the right capabilities under a 24x7 must-offer obligation.
3. Sufficient flexibility to adapt to the rapidly evolving demand and resource mix.
4. Resource counting rules that accurately reflect resource availability and their contribution to reliability, including consideration of outage rates, use limitations, and availability limitations.
5. Sufficient capability to meet both energy and capacity needs, including resources to meet storage charging demand.
6. Ensure sufficient resource capacity and capability are contracted to meet RA capacity requirements without unnecessary reliance on CAISO backstop procurement.
7. Coordinate and integrate with CAISO’s RA construct, recognizing and respecting that the CAISO must administer efficient, implementable, and operable RA programs for all local regulatory authorities (LRAs) within the CAISO balancing area.
8. Ensure buyers and sellers can efficiently and economically contract for resource adequacy supply with commercially viable options to ensure rational compliance with the planning targets.
9. Consider important linkages and dependencies of efficiently and effectively operating an RA program within a greater regional Western RA framework.

⁴ Cal. Pub. Util. Comm’n, *Decision On Track 3B.2 Issues: Restructure Of The Resource Adequacy Program*, D.21-07-014, at 25-28, Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Forward Resource Adequacy Procurement Obligations, R.19-11-009, Jul. 15, 2021.

⁵ The CAISO articulated many of these attributes in its Opening Comments on Resource Adequacy Working Group Report, March 24, 2022, Attachment A. The attributes reflected here reflect an evolution driven by the wealth of information exchanged in this proceeding and by the CAISO’s continued evaluation of RA requirements.

Although the PD acknowledges many of the attributes above, it also reflects that much work remains to be done to develop various elements of SCE’s 24-hour slice approach and related procedures to complete the design and also ensure we obtain a harmonized, complete, reliable, and workable RA program for all of California. With that in mind, the CAISO offers these priorities to guide the development of a robust RA program that will enhance grid reliability.

1. The Commission Should Prioritize Developing a Process to set the Planning Reserve Margin Using a Loss of Load Expectation Study and Also Ensure Resource Counting Rules Align with Planning Reserve Margin Levels

The Commission and CAISO should evaluate critical planning questions through a logical sequencing of analytical steps, employing state-of-the-art modeling techniques. The RA fleet should at a minimum meet a loss of load expectation (LOLE) of 0.1 days/year and a PRM to support that LOLE outcome. This includes meeting reliability needs across all critical operational periods, including multiple-day, high-load conditions and other risks posed by climate change. This analysis will need to identify the overall portfolio effects of resource additions and contracting decisions to understand how to achieve reliable supply and cost efficiencies.

Appendix A of the PD notes that the PRM and counting rules for 2024 depend upon and “should await the refreshed LOLE outputs from the Integrated Resource Plan (IRP) proceeding.”⁶ Although the CAISO agrees with this ordering, there are no additional details to discuss the critical inputs for the LOLE study such as the portfolio to be assessed or the load

⁶ PD, Appendix A at 2.

forecast. In comments on Energy Division staff's LOLE study,⁷ the CAISO shared party concerns that the analysis did not target the industry standard 0.1 LOLE threshold, but a higher and insufficient 0.16 LOLE.⁸ Given the importance of the LOLE study as the cornerstone of the 24-hour framework, the Commission should include specifics around the LOLE study (inputs, assumptions, methodology, and validation of results) and a process for conducting the LOLE study annually and any necessary iterative steps in Workstream 2: Determine PRM and Counting Rules. This workstream should have a new and equally important item: (a) LOLE study process. The Commission should prioritize this item within Workstream 2.

SCE's 24-hour slice approach likely will rely more on the outcome of deterministic modeling with the need for resource counting rules and PRM levels set to meet reliability needs. The Commission will also need to develop rational capacity counting rules that reflect the contribution resources make to reliability and consider the reliability risks of allowing one resource type to eclipse investment in a diverse RA fleet. While the CAISO remains hopeful that such modeling and counting rules can be developed through the workshop process, the CAISO also notes that if the PD is adopted the Commission is charting a new path in the reliance on exceedance values and deterministic modeling that likely will produce significant challenges to address. Particularly given the magnitude of use-limited and non-dispatchable resources coming onto the system, proving out the modeling is key to ensuring the program is effective. The Commission will need to determine whether the redefined deterministic modeling and resource counting processes are producing results that align with the Commission's principles or whether

⁷ California Public Utilities Commission Energy Division Staff, Energy Division Study for Proceeding R.21-10-002: Loss of Load Expectation and Effective Load Carrying Capability Study Results for 2024, Feb. 18, 2022 (ED Staff LOLE Study).

⁸ Reply Comments on the Loss Of Load Expectation Study of the California Independent System Operator Corporation, at 3, R.21-10-002, Mar. 22, 2022 (CAISO LOLE Study Reply Comments).

probabilistic modeling (such as effective load carrying capability study processes) produce better outcomes. This topic fits well into the items within Workstream 2. Given these two critical priorities, the Commission should ensure Workstream 2 takes precedence over the other workstreams.

2. The Commission Should Ensure Continued Inter-Operability with the CAISO, Other Local Regulatory Authorities, and the West

The Commission and CAISO must ensure the RA program leads to products that allow buyers and sellers to contract for RA supply efficiently. The Commission and the CAISO also must strive to interact seamlessly with the RA programs of other local regulatory authorities in the CAISO balancing authority area and of other balancing authority areas across the Western region. California is not only an import-dependent state, relying on capacity from neighboring balancing areas throughout the West, but also operates in a complex market for RA capacity through the Western Interconnection. That wider market for capacity is becoming more constrained as other parts of the West experience changes in their own fleet of resources. Ensuring RA products and processes are transactable and fungible across the West will be critical to ensuring the Commission and the CAISO can meet our collective reliability needs in a cost effective manner while also relying on a diverse resource mix.

The PD maintains the current requirement that resources must be deliverable to sell RA as determined by the CAISO's deliverability assessment, and all resources will continue to have a single monthly net qualifying capacity (NQC) value representing the deliverability-adjusted peak-hour contribution.⁹ These values will be used for both RA showings and for CAISO deficiency determinations.¹⁰ The CAISO appreciates and strongly supports the PD's direction

⁹ PD, Appendix A at 3.

¹⁰ *Id.*

and the need for further discussion. For example, it is not clear to the CAISO whether identifying a single hour for evaluation within the 24 hourly slices is sufficient and looks forward to discussing this further in workshops. In the current deliverability methodology, the CAISO already analyzes two periods for deliverability.¹¹ Last, the PD also recognizes the CAISO’s role in determining deliverability for RA capacity and that any changes to that process must be discussed in the CAISO’s stakeholder process.¹² The CAISO agrees Workstream 3 is the proper venue to discuss this issue.

The CAISO recommends the Commission remove discussion of flexible capacity from the workshop scope as the need determination for flexible capacity falls under the CAISO tariff and will require a CAISO stakeholder process to modify. The “worst day” approach might not coincide with days with the greatest three-hour net load ramp, which is the current basis for flexible capacity requirements. Flexible capacity should be discussed in a separate phase of this proceeding in concert with a CAISO stakeholder process. The Commission should modify Workstream 3 to delete the current item (c) “elimination of the flexible RA requirements.”

Finally, we note that the Commission is proposing to keep the current penalty structure for LSE non-performance. The CAISO recognizes that the Commission has recently increased

¹¹ The current CAISO deliverability methodology was adopted and approved by the Federal Energy Regulatory Commission in 2020 based on the results of an open and transparent CAISO stakeholder process. During the process, the CAISO conducted a complete review of deliverability requirements, considering the specific issues of use-limited resources and the changing RA fleet, and found that two different periods—a peak and off-peak period—was sufficient. Additional information is available at: <https://stakeholdercenter.caiso.com/StakeholderInitiatives/Generation-deliverability-assessment>.

¹² PD at 92. The CAISO reviews study assumptions on an ongoing basis and has not identified a need for another methodology review.

the penalty level for system RA deficiencies¹³ with escalating penalties for persistent failures.¹⁴ These incentives to contract are critical to ensure the Commission (and ultimately the CAISO balancing authority) has sufficient capacity to meet its reliability needs. Without both adequate PRM levels and effective incentives to contract, the CAISO is limited in the mechanisms it can use to backstop the RA program. The CAISO urges the Commission to carefully evaluate the efficacy of its incentive mechanisms and commits to partner with the Commission and other LRAs to ensure that any associated backstop mechanisms work in tandem to meet the collective reliability goals of the Commission, the CAISO, and other LRAs in the CAISO balancing authority.

3. The Commission Should Prepare for Contingencies by Creating Off-Ramps

The PD schedule for workshops leading to a proposed decision in the first quarter of 2023 is likely too optimistic given the numerous complex and detailed discussions needed to resolve issues that may need to be sequenced or are interdependent. The Commission should prioritize Workstream 2 and specifically the development of an LOLE study process for setting PRM and resource counting rules. The CAISO believes this will be a significant and timely challenge to address to prove out the reliability and efficiency of the 24-hour slice reforms.

The PD wisely proposes a test year in 2024 to evaluate the new processes under the 24-hour slice framework but offers no contingency plans or off-ramps should study results or

¹³ Cal. Pub. Util. Comm'n, *Decision Adopting Local Capacity Obligations For 2021-2023, Adopting Flexible Capacity Obligations For 2021, And Refining The Resource Adequacy Program*, D. 20-06-031, Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Forward Resource Adequacy Procurement Obligations, R.19-11-009, June 30, 2020.

¹⁴ Cal. Pub. Util. Comm'n, *Decision Adopting Local Capacity Obligations For 2022-2024, Flexible Capacity Obligations For 2022, And Refinements To The Resource Adequacy Program*, D. 21-06-026, Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Forward Resource Adequacy Procurement Obligations, R.19-11-009, June 24, 2021.

processes get delayed or not achieve the objectives or principles (particularly around reliability). The Commission should consider such a contingency plan, including potential milestones and criteria that would trigger the plan. For example, a contingency plan could simply include maintaining the current effective load carrying capability (ELCC) and an associated PRM calculation process based on an accurate LOLE study. The Commission should consider contingency plans including the timing and work products to support such a plan if needed.

B. The CAISO Supports Adoption of the 2023-2025 Local Capacity Requirements, 2023 Flexible Capacity Requirements, and CAISO’s 2023 Availability Assessment Hours

The PD adopts the local capacity requirements (LCR) the CAISO included in its 2023 Final LCR Report and determined that, based on outcomes of the LCR Working Group, no further action is necessary to modify LCR criteria at this time.¹⁵ The PD also adopts the flexible capacity needs identified in the CAISO’s Final FCR Report.¹⁶ Additionally, the PD revises the Commission’s RA measurement hours to align with the CAISO’s revised RA availability assessment hours (AAHs), which include a new “spring” season (March-April).^{17,18} Finally, the PD revises the maximum cumulative capacity (MCC) bucket structure to align with the revised AAHs and RA measurement hours.¹⁹

¹⁵ PD, at 9 & 11 (“The Commission finds the recommended LCR values for 2023 – 2025 to be reasonable. Accordingly, CAISO’s recommended 2023 – 2025 LCR values set forth in the table above are adopted”).

¹⁶ *Id.* at 14 (“In light of the brief review period available for the Final FCR Report, the Commission finds that the FCR figures appear reasonable. Accordingly, CAISO’s recommended values set forth in the table above are adopted”).

¹⁷ The CAISO’s AAH are 4pm-9pm for winter and summer months (January to February and June to December). The newly introduced spring season’s (March – April) AAH are 5pm-10pm.

¹⁸ PD at 14 (“the Commission finds CAISO’s revised AAHs for the spring months of March and April to be reasonable and adopts the same revised hours for the RA measurement hours”).

¹⁹ *Id.* at 15 (“MCC buckets 1, 2, and 3 are modified to reflect the newly adopted measurement hours”).

The CAISO strongly supports these aspects of the PD and appreciates the Commission’s recognition of the analysis the CAISO conducted to support these measures. The CAISO also appreciates the Commission directing parties to participate in the CAISO’s LCR stakeholder process to address any potential changes.²⁰ As requested by the Commission, the CAISO will coordinate with Energy Division staff to ensure that information about CAISO’s stakeholder process is properly and timely noticed to the RA proceeding service list.²¹

C. The CAISO Supports the Planning Reserve Margin Increase for Resource Adequacy Year 2023 but the Commission Should Commit to a Loss of Load Expectation Study to Develop the Planning Reserve Margin for 2024

The Commission’s RA program requires LSEs to procure sufficient capacity to meet their gross peak demand plus a 15 percent PRM. The PD increases the PRM to 16 percent for the 2023 RA year. The PD sets the PRM for 2024 to be no less than 17 percent for the 2024 RA year. The final PRM value for 2024 may be increased after stakeholders and the Commission review updates to Energy Division’s stochastic LOLE study. The Commission also clarified that the proposed PRM increase for 2023 does not change the procurement issued under D.21-12-015 to meet a 20.5 percent to 22.5 percent effective PRM.

The CAISO supports the PRM increase as this is directionally consistent with other recent studies and analyses, including from Energy Division staff, indicating a need for capacity beyond the current 15 percent PRM.²² However, without an actual study that confirms the RA

²⁰ *Id.* at 9.

²¹ *Id.* at 9.

²² See, e.g., Cal. Pub. Util. Comm’n, *Decision Directing Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas and Electric Company (SDG&E) to Seek Contracts for Additional Power Capacity for Summer 2021 Reliability*, D.21-02-028, Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Reliable Electric Service in California in the Event of an Extreme Weather Event in 2021, R.20-11-003, February 11, 2021; ED Staff LOLE Study; Cal. Pub. Util. Comm’n, *Phase 2 Decision Directing PG&E, SCE, and SDG&E to Take Actions to Prepare for Potential Extreme Weather in the Summers of 2022 and 2023*, D.21-12-015, Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure

portfolio meets a 0.1 days/year LOLE, it is not clear whether a 16 or 17 percent PRM will meet reliability even with ELCC adjustments for wind and solar. For the 2024 RA year, the CAISO urges the Commission to prioritize updating the PRM based on a stochastic LOLE analysis that meets a 0.1 days/year threshold. The CAISO agrees with the Commission that further vetting of the modeling inputs and assumptions in Energy Division staff's LOLE analysis is necessary to update the PRM for resource adequacy year 2024. As discussed above, such an LOLE study and process is also a prerequisite to a reliable 24-hour slice framework and should be prioritized in upcoming workshops proposed in the PD.

The CAISO reiterates its continuing concerns about the use and efficacy of an “effective” PRM because it does not necessarily provide the CAISO with the tools to ensure reliability. The CAISO cannot identify a procurement deficiency and authorize backstop procurement in the month-ahead timeframe to cure deficiencies in meeting an “effective” PRM. Similarly, those deficiencies would not necessarily constitute a “Significant Event” under the CAISO tariff to trigger backstop procurement. Non-RA capacity used to meet an “effective” PRM also is not subject to RA rules defined in the CAISO tariff such as the RA must-offer obligations, bid generation, and resource adequacy availability incentive mechanism non-availability charges.

D. The Commission Should Update the Effective Load Carrying Capability Values for Wind and Solar Resources and Improve Upon the Methodology Used to Develop These Values

The PD finds that the Commission should update the solar and wind capacity counting rules under the ELCC methodology “to more accurately account for resources’ reliability

Reliable Electric Service in California in the Event of an Extreme Weather Event in 2021, R.20-11-003, December 2, 2021; Opening Testimony of the California Independent System Operator Corporation, R.20-11-003, Sept. 1, 2021; Opening Testimony of the California Independent System Operator Corporation, R.20-11-003, Jan. 11, 2021.

contribution.”²³ Specifically, the PD adopts the ELCC values from Scenario D of the Energy Division’s LOLE study.²⁴

The CAISO supports the direction of these changes. As the Commission notes, these ELCC values were last updated in 2019 for resource adequacy year 2020. The CAISO agrees with the Commission it is necessary to update the ELCC values for 2023 and beyond to more accurately account for resources’ reliability contribution given the rapid growth of solar, storage, and wind resources.²⁵ The CAISO also supports the PD’s adoption of the Scenario D values because this scenario represents a reasonable proxy for resources realistically expected to come online and be shown for resource adequacy.²⁶ In prior comments, the CAISO encourages the Commission to provide additional information and discussion of the methodology used to develop the ELCC values.²⁷

E. The Commission Should Adjust the Load Impact Protocol by a Loss of Load Probability as an Interim Demand Response Counting Methodology

The PD considers several alternative approaches to setting the qualifying capacity (QC) value for demand response resources. The Commission will further review the Loss of Load Probability (LOLP)-weighted Load Impact Protocol (LIP) Proposal as an interim QC methodology for demand response.²⁸ This approach revises the LIP approach by weighting each

²³ PD at 23.

²⁴ *Id.* at 23-24.

²⁵ *Id.* at 23.

²⁶ Opening Comments on the Loss of Load Expectation Study, Local Capacity Requirement/Flexible Capacity Requirement Schedule and Local Capacity Requirement Working Group Report of the California Independent System Operator Corporation, at 3, Mar. 14, 2022.

²⁷ *Id.* at 3-4 and 8; CAISO LOLE Study Reply Comments at 5-6.

²⁸ PD, at 39

hour “by the relative likelihood of loss of load events.”²⁹ The PD separately defers consideration of a longer-term demand response counting methodology pending further results from the California Energy Commission’s (CEC) demand response working group.³⁰

The CAISO supports this decision because the LOLP-weighted LIP methodology considers demand response availability during the most critical hours and is an improvement over the *status quo* LIP process. The CAISO also agrees this should only be an interim approach for the 2023 and 2024 RA years, subject to the Commission’s review of the CEC’s LOLE study from the CEC’s September 2021 Midterm Reliability Analysis Staff Report. The CAISO supports the Commission’s direction to evaluate the CEC’s LOLE study results to develop the LOLP weighting under this methodology before adopting the proposal. The CAISO looks forward to further discussion on potential Commission adoption of the LOLP-weighted LIP approach as an interim demand response counting methodology for 2023 and 2024.³¹ The CAISO also supports the CEC working group’s continued efforts to identify a long-term counting methodology for demand response that aligns with the resource adequacy reform framework. The CAISO will continue to participate in the CEC working group and looks forward to continued collaboration with the Commission, CEC, and other parties.

F. The Commission Should Not Adopt Resource Adequacy Capacity Values for Behind-The-Meter Resources Exporting to the Grid at This Time

The PD considers a proposal from the Joint DER Parties for a QC methodology for behind-the-meter (BTM) resources based on their ability to export to the grid. Citing concerns raised by parties, including the CAISO, the PD finds “the proposal is premature and fails to

²⁹ *Id.* at 33

³⁰ *Id.* at 39-40.

³¹ *Id.* at 39.

address the threshold issues the Commission” identified to justify establishing a QC methodology that accounts for BTM resources’ ability to export.³² Although the CAISO recognizes that BTM resources can provide value towards meeting reliability needs, the CAISO agrees with the PD that issues regarding visibility and availability of BTM resources for dispatch in CAISO markets are not sufficiently addressed by the proposal and should not be adopted at this time.³³ The CAISO continues to support developing a pathway for BTM resources to receive compensation commensurate with the benefits they provide and remains open to coordinating further with all interested parties on this issue.

III. Conclusion

The CAISO appreciates the opportunity to provide comments on the PD to ensure a safe, reliable, and efficient RA paradigm. For the 24-hour slice workshops proposed in the Reform Track Phase 2, the Commission should include within “Workstream 2: Determine PRM and Counting Rules” a new item: (a) “LOLE study process” and prioritize its discussion within the workstream. The entirety of Workstream 2 should be prioritized ahead of other workstreams. Last, the Commission should modify “Workstream 3: CAISO and Commission Validation and Compliance” to delete item (c) “elimination of the flexible RA requirements.”

The Commission should also: (1) adopt the 2023-2025 local capacity requirements; (2) adopt the 2023 flexible capacity requirements; (3) adopt the CAISO’s 2023 availability assessment hours with commensurate change in the maximum cumulative capacity bucket structure; (4) increase the PRM for 2023 and 2024; (5) update the effective load carrying capability values for wind and solar; (6) provide an opportunity to implement an interim demand

³² *Id.* at 54

³³ *Id.* at 54.

response counting methodology; and (7) decline adoption of RA capacity values for behind-the-meter resources at this time.

The CAISO looks forward to working with the Commission and parties to address the many questions that must be resolved through an analytically rigorous, clear, and transparent process that is needed to evolve the RA program.

Respectfully submitted
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Dated: June 9, 2022