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SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) COMMENTS ON RULING SEEKING COMMENTS ON RELIABLE AND CLEAN POWER PROCUREMENT PROGRAM STAFF PROPOSAL

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SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) COMMENTS ON RULING SEEKING COMMENTS ON RELIABLE AND CLEAN POWER PROCUREMENT PROGRAM STAFF PROPOSAL RULING

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Pursuant to the Administrative Law Judge's Ruling ("ALJ Ruling") Seeking Comments on Reliable and Clean Power Procurement Program ("RCPPP") Staff Proposal ("Staff Proposal"), dated April 29, 2025, and the Email Ruling Granting Request for Extension of Time, dated May 14, 2025, Southern California Edison Company ("SCE") respectfully submits these comments to the California Public Utilities Commission ("Commission" or "CPUC"). In accordance with the Email Ruling in Response to Motion for Clarification of Alliance for Retail Energy Markets, dated June 16, 2025, SCE is concurrently submitting its Alternative Proposal to the Reliable and Clean Power Procurement Program Staff Proposal Regarding Greenhouse Gas Reduction ("Alternative Proposal").

I.
INTRODUCTION

The development of the RCPPP comes at a challenging time for California's electric system. Achieving the state's ambitious greenhouse gas ("GHG") emissions reduction and clean energy goals requires the construction of an unprecedented amount of new clean energy resources with electrification and data center load growth putting additional stress on system reliability. As peak load moves to the evening and winter, the system needs a diverse portfolio of resources to meet customer needs and cost-effectively reduce GHG emissions, including clean

firm resources that can deliver in all 24 hours. Meanwhile, there are several barriers to the near-term development of the new and diverse clean resources needed by the grid, including a constrained interconnection queue that is almost entirely filled with solar and storage resources, permitting challenges, the accelerated phase-out and new requirements of federal tax credits for clean resources, tariff uncertainty, and development of new major transmission lines to interconnect resources. Customer rate affordability also remains a critical concern for the Commission, load-serving entities ("LSEs"), other stakeholders, and the entire state.

SCE agrees with Staff that the framework adopted for the RCPPP should be effective, affordable, fair, feasible, and predictable.[1] A successful and equitable RCPPP should allocate across all LSEs the responsibility for developing the new resources needed to reliably meet California's GHG emission reduction and clean energy goals while maintaining customer rate affordability and accounting for the major challenges facing the development of new resources.

The Commission should prioritize reliability above all else. California cannot risk facing another reliability event like the rolling blackouts experienced in 2020 and the emergency and near rolling blackouts in 2022. Yet with large increases in load required for data centers and electrification continuing to push demand for electricity even higher, and increasing extreme weather events due to climate change, the electric grid risks being in the same situation again.

To address these risks, the Commission should adopt Option II for the reliability portion of the RCPPP. Option II will help ensure the state can maintain system reliability by including specific new reliability resource procurement requirements, and allocating responsibility for the new reliability resource development needed by the system to all LSEs by load share. Option II builds on the success of the Commission's mid-term reliability ("MTR") procurement orders, which required all LSEs under the Commission's Integrated Resource Planning ("IRP") purview to procure 15,500 megawatts ("MW") of September net qualifying capacity ("NQC") from resources incremental to the baseline resource portfolio. Indeed, in recent history, the vast

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[1] *See* Staff Proposal at 2.

majority of new reliability resource development has occurred through either Commission orders requiring all LSEs to procure their share of the incremental resource procurement need or investor-owned utility ("IOU") procurement of new resources on behalf of all LSE customers, with the costs and benefits shared by all LSEs.

In contrast, there is no clear evidence that the Resource Adequacy ("RA") program, which allows LSEs to meet their individual reliability requirements with existing or new resources, has led to a material amount of new resource development over the history of the program. Option I is essentially an expanded RA program where LSEs could meet their reliability requirements with existing or new resources. SCE is concerned that if Option I were adopted, there will not be sufficient assurance that the necessary new reliability resources will come online or that responsibility for procuring new reliability resources is fairly shared among all LSEs. The Commission should not risk reliability on the unproven hope that an RA-like Option I reliability program will produce the new reliability resource development needed by the system. The Commission should continue a proven reliability approach by approving Option II with the minor modifications discussed in Sections II and III below.

For the GHG reduction portion of the RCPPP, SCE recommends a simplified mass-based GHG reduction program as discussed in SCE's concurrently filed Alternative Proposal. A mass-based GHG reduction approach is superior to the proposed Clean Energy Standard ("CES") because it more directly focuses compliance on procured clean energy resources that limit the total forecasted GHG emissions from LSEs' portfolios at an hourly level across key milestone years and promotes development of the diverse clean energy resources needed to meet the state's GHG reduction goals. However, if the Commission chooses to adopt a CES framework for the reasons outlined in the Staff Proposal, then the Commission should adopt an "Enhanced CES" approach that combines the required targets for Renewables Portfolio Standard ("RPS")-eligible and zero-carbon resources with guardrails to ensure the clean energy resources procured by LSEs are effective at reducing GHG emissions. Because the near-term clean energy targets are likely to be largely met with solar resources, SCE proposes the Commission initially implement a

storage requirement that helps ensure that the system has sufficient storage to shift the contribution of solar energy to critical hours when the system is reliant on gas resources to meet demand.

Furthermore, it is vital that the RCPPP includes a flexible compliance framework[2] that recognizes the multifaceted challenges facing development of new and diverse clean resources, including policy change at the federal level, modification and near-term accelerated phase-out of tax credits, tariff policy uncertainty, and upward price pressures. Moreover, the lack of resource diversity in the interconnection queue and the compounding permitting and interconnection queue delays are further challenges to new resource development. Electric rate affordability is also a challenge for many customers.

To be clear, SCE continues to support California's grid decarbonization goals and works to enable decarbonization of other sectors through electrification. However, in order to help ensure sufficient amounts of new clean resources are added to the grid at the least cost to support customer affordability, the RCPPP must be designed with appropriate flexible compliance measures that recognize the current constraints on adding large amounts of new clean resources to the grid. Many of these constraints are entirely outside the control of LSEs.

The Commission should not only consider what the cost of meeting compliance will be in the near-term, but whether it is possible based on the resources that exist in the interconnection queue and expected load growth across the state. Indeed, SCE's analysis in Section IV.A shows that the cumulative effects of the issues described above are expected to increase costs by approximately $8 billion on a California Independent System Operator ("CAISO") system level for the year 2035 and continue thereafter. In Section IV.B, SCE also demonstrates that achieving Staff's proposed indicative 87% CES target for 2028-2030 with the most current Integrated Energy Policy Report ("IEPR") load forecast would require a new resource build-out roughly

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[2] SCE's request for flexible compliance applies more directly to the GHG reduction portion of RCPPP given the need to prioritize system reliability.

equivalent to the entire existing fleet of solar resources in the CAISO system (~23 gigawatts ("GW")) in two and a half years.

As addressed in Sections II and IV below, the RCPPP flexible compliance framework for GHG reduction should include: revisiting the current IRP electric sector 2030 and 2035 GHG targets during this IRP cycle to determine whether the current trajectory to meeting these goals and the 2045 goal can feasibly and affordably be achieved; starting the first compliance period for the RCPPP GHG reduction program in 2031; allowing banking of renewable energy credits ("RECs") and zero-emission credits ("ZECs") across compliance periods if the Commission adopts a CES; and developing a penalty waiver process where an LSE will not be penalized if the LSE demonstrates it could not meet the compliance target despite its best efforts to procure and/or due to customer affordability considerations. The Commission should also develop a penalty waiver process similar to what is used for MTR procurement for the RCPPP reliability program, but SCE suggests that the process be reviewed and administered by Energy Division staff for administrative ease and their ongoing familiarity with LSEs' procurement efforts.

Finally, SCE agrees with Staff that predictability is an important design principle for the RCPPP.[3] LSEs are already procuring clean resources to meet expected GHG reduction goals and reliability requirements and need certainty on how resources will "count" over the long-term so they can make informed co-optimized procurement decisions on behalf of their customers. As the Staff Proposal recognizes, an RCPPP that provides LSEs with predicable requirements with sufficient lead time to procure least cost, best fit resource options also supports affordability through more competition.[4] SCE urges the Commission to adopt overall frameworks for both the reliability and GHG reduction portions of the RCPPP this year to provide this certainty. The Commission can continue to resolve specific implementation details for the RCPPP through workshops, subsequent comments, and a second decision if needed. However, if the Commission believes the full RCPPP is not yet ready for adoption, the Commission should

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[3] *See* Staff Proposal at 2.
[4] *See id.* at 1-2.

prioritize reliability and implement Option II with SCE's proposed minor modification this year to ensure the system remains reliable. The Commission should also authorize the IOUs to flexibly procure to meet their RCPPP procurement requirements with approval through Tier 3 advice letters or Bundled Procurement Plan authority if applicable and cost recovery through the applicable Portfolio Allocation Balancing Account ("PABA") subaccount based on contract execution date.

II.

SUMMARY OF SCE'S PROPOSALS

A. The Commission Should Adopt Reliability Option II With Minor Modifications

As addressed in Section III, the Commission should adopt Staff's proposed Reliability Option II with minor modifications. Option II provides several benefits that are critical to system reliability over Option I. Most importantly, Option II is most likely to achieve the fundamental goal of any IRP reliability procurement program – developing the new resources needed to maintain system reliability, which also collectively benefits all customers. Option II follows the proven approach that has worked to develop new reliability resources in the past by establishing new reliability resource procurement requirements and allocating the responsibility for such new resource development to all LSEs by load share. In comparison, Option I follows an expanded RA program approach where LSEs have no explicit new reliability resource procurement requirements and can meet their procurement targets with either existing or new resources. However, the RA program has not led to material amounts of new reliability resource development in the past and the Commission should not risk reliability on the assumption that an expanded RA program through Option I will do so in the future.

Option II also leverages the successful MTR procurement approach that has resulted in significant new resource development, and would provide a smooth transition from MTR to RCPPP once implemented. In addition, Option II minimizes the negative impacts of the marginal effective load carrying capability ("ELCC") construct (*i.e.*, potential for significant

year-over-year volatility, misalignment with RA compliance counting) compared to Option I,[5] and would also avoid or minimize other negative effects of Option I including inconsistencies with the RA program and increases in existing RA prices that are likely to result as the prices for existing RA resources converge to the new resource prices under Option I. For all these reasons, the Commission should adopt Option II, not Option I.

SCE recommends the Commission make minor modifications to Option II. First, the Commission should eliminate RCPPP contracting sufficiency penalties but retain online sufficiency penalties. As shown by the effectiveness of the MTR procurement, which did not include contracting sufficiency penalties, the only penalty structure needed to ensure that resources come online is the online sufficiency penalty. Adding a contracting sufficiency penalty will not ensure resources will timely come online and could result in LSEs signing contracts that do not have strong incentives to assure developer performance to avoid penalties, or, even worse, result in sham contracts designed only to avoid penalties. The Commission does not want to place itself in the difficult position of determining the difference between "real" and "fake" contracts. Moreover, including both RCPPP contracting sufficiency and online sufficiency penalties under Option II as well as overlapping penalties in the expanded multi-year RA program could result in LSEs receiving multiple redundant penalties for the same deficiency, which is an overly punitive and unreasonable structure.

Second, as it did with the MTR procurement, the Commission should allow LSEs to procure short-term bridge resources to account for delays in new resource online dates. The Commission recognized that short-term bridge procurement allows for additional development time for new resources to come online without compromising short-term reliability.[6] The Commission should follow the MTR approach and allow short-term bridge

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[5] As addressed in Section III, SCE proposes that the Commission bound the marginal ELCC values used in the RCPPP reliability program, but that bounding does not fully address the negative impacts of the marginal ELCC construct.

[6] *See* D.23-02-040 at 39 ("The basic concept is to allow for additional development time for new resources to come online without compromising short-term reliability, by contracting on a short-term basis with existing resources to be firm and committed to serving load in California.").

procurement under Option II with the same three-year time limit and other rules as applicable in MTR.[7]

Third, as further explained in Sections II.B, III, and IV, the Commission should establish a penalty waiver process that can be utilized by LSEs who can demonstrate best efforts to procure new resources, but for reasons beyond their control the contracted resources fail to come online as required (bridging notwithstanding), or not enough resources exist for an LSE to meet its requirements.

Finally, as discussed in Section III, the Staff Proposal has not provided justification for adding a 2.5% buffer ***and*** a 1.5% to 3% Collective Capacity Reserve ("CCR") on top of LSEs' reliability procurement requirements that already meet an industry-standard 0.1 loss-of-load expectation ("LOLE") requirement. Although SCE agrees that system reliability should be the Commission's top priority, customer affordability is also a critical concern. Adding a buffer and a CCR to the reliability procurement requirements that already meet a 0.1 LOLE requirement will significantly increase costs to customers without any practical benefit. Therefore, the Commission should decline to adopt an LSE buffer and perform further analysis to justify the need for a CCR, which should be minimized to the extent possible to promote customer rate affordability.

B. The RCPPP Should Include a Flexible Compliance Framework That Recognizes the Major Near-Term Barriers to Clean Resource Development

The Commission must establish reasonable GHG reduction targets that keep California on a long-term decarbonization trajectory and give LSEs flexibility in demonstrating compliance with the RCPPP GHG reduction and reliability programs given the serious challenges facing development of new and diverse clean resources and affordability considerations. There are

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[7] If the Commission grants SCE's Petition for Modification of D.23-02-040 and D.24-02-047 filed March 21, 2025, then the Commission should also extend the modified requirements to the RCPPP reliability procurement program so that LSEs are not required to procure bridge resources in non-Q3 months as long as they met system RA requirement for that month.

many barriers to new clean resource development that significantly challenge the feasibility and affordability of meeting aggressive near-term IRP GHG reduction targets. These barriers will also affect the development of the new clean resources needed for system reliability.

These critical challenges include significant increases in interconnection and permitting delays, supply chain constraints, accelerated phase-out of federal tax incentives for solar and wind resources, tariff uncertainty, transmission constraints, and lack of sufficient renewable resources and diversity as the current CAISO interconnection queue is approximately 93% solar and battery storage.[8] The accelerated phase-out of federal tax credits is causing developers to seek price increases from LSEs, shifting the elevated cost burden to customers. The establishment of tariffs and the on-again-off-again threat of increased tariffs levied on imports from certain countries has also caused developers to delay procurement decisions until there is more cost certainty or attempt to negotiate contract provisions that shift all or some of those increased costs to the buyer. These market conditions not only affect the viability of projects to achieve their expected online dates, but will also significantly increase costs to customers at a time when customer electric rate affordability is already a critical concern for the Commission, LSEs, and the entire state.[9]

SCE submits the Commission will need to adopt a more modest near-term electric sector GHG trajectory on its path to meeting California's 2045 clean energy goals in recognition of these practical challenges and affordability concerns. SCE's proposed flexible compliance framework provides LSEs with necessary flexibility in the near-term given the current challenges to new and diverse clean resource development, while still keeping the state on track to meet its

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[8] *See* CAISO, Uncorking the Bottleneck: Addressing Barriers to New Resource Development and Interconnection, at 3, available at: https://cal-cca.org/wp-content/uploads/2025/05/Uncorking-the-Bottleneck.pdf.

[9] *See* Executive Order N-5-24, October 30, 2024 (requesting the Commission examine the benefits and costs to electric ratepayers of programs it oversees and rules and orders it has promulgated pursuant to statutory mandates that may be unduly adding to electric rates, or whose funding might more appropriately come from a source other than ratepayers), available at: https://www.gov.ca.gov/wp-content/uploads/2024/10/energy-EO-10-30-24.pdf.

long-term decarbonization goals. Specifically, SCE proposes the following for its flexible compliance framework:

1. Begin the first compliance period for the new RCPPP GHG reduction program in 2031 (*i.e.*, if SCE's simplified mass-based approach is adopted, the first compliance period would run 2031-2035; if a CES framework is adopted, the first compliance period would run 2031-2033);
2. Use this IRP cycle to establish attainable and reasonable GHG million metric ton ("MMT") targets for upcoming milestone years;
3. Establish a penalty waiver process; and
4. Allow banking across compliance periods if a CES is adopted.

1. GHG Reduction Program Compliance Should Begin in 2031

SCE proposes that the Commission give LSEs flexibility in procuring resources by beginning the first compliance period for the RCPPP GHG reduction program in 2031.[10] Section IV.B describes the infeasibility of achieving the indicative target for the 2028-2030 CES proposed in the Staff Proposal at the system level based on the queue of in-development resources. SCE's analysis finds that the clean energy share in 2028 is projected to be approximately 61%, which falls significantly short of the indicative 87% CES target proposed for 2028-2030 in the Staff Proposal,[11] resulting in a 26% gap. To put this gap into perspective, to meet the 87% target, the shortfall is roughly equivalent to the entire existing fleet of solar resources in the CAISO system (~23 GW), which would have to come online in two and a half years. As such, achieving the proposed 87% CES target starting within the next two to three years would require doubling the current solar generation capacity – an unrealistic build-out

[10] As described in SCE's Alternative Proposal, SCE proposes five-year compliance periods for its mass-based GHG reduction program (*i.e.*, 2031 through 2035, 2036 through 2040, and so on) and two paths for demonstrating compliance.

[11] *See* Staff Proposal at 45.

under any assumptions and an impossible goal with the status of the CAISO interconnection queue.[12]

Further, beginning the first compliance period in 2031 allows LSEs additional lead-time to procure to meet new procurement requirements that are not likely to be fully implemented until 2026 at the earliest.[13] Staff notes that one of the benefits of an RCPPP is providing LSEs with predicable requirements that allow contracting further out in time, providing opportunities for increased supply options and lower costs for customers.[14] But the RCPPP GHG reduction program will not provide those benefits to customers if the first compliance period starts in 2028 as proposed, especially given the near-term challenges for new and diverse clean resource development.

2. This 2024-2026 IRP Cycle Should Establish Attainable and Reasonable GHG Targets for Future Milestone Years

SCE urges the Commission to use this 2024-2026 IRP cycle to evaluate the feasibility and cost associated with the near-term GHG targets established in D.24-02-047 and consider establishing more attainable GHG targets for the RCPPP GHG reduction procurement program that are still within the California Air Resources Board's ("CARB") electric sector planning target range. SCE's analysis in Section IV.A describes how the cumulative impact of the issues described above is expected to drive total system costs up by an estimated annual amount that will reach approximately $8 billion on a CAISO system level for the year 2035 and continue thereafter. The CAISO-queue constraint itself could increase the required new resource build-out from 40 GW to 60 GW of solar, and from 12 GW to 32 GW of storage, between now and 2035. Even if bringing the necessary amount of new clean resources online in the near-term in

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[12] Achieving a mass-based target in the 2028-2030 timeframe is likely even more infeasible and impossible.

[13] SCE supports adoption of RCPPP reliability and GHG reduction program frameworks this year; however, consideration of some program implementation details is likely to extend into 2026 and potentially 2027.

[14] *See* Staff Proposal at 1-2.

this environment were feasible (and it may not be given the numerous challenges noted above), the impact on customer affordability would be significant and must factor into the Commission's consideration of the near-term GHG MMT targets and trajectory out to 2045.

To mitigate customer rate impacts and in acknowledgement of the current challenges facing the development of clean energy resources, SCE supports consideration of near-term GHG MMT targets that are at the higher end of the CARB electric sector target range. As CARB acknowledged in its 2022 Scoping Plan, "[m]uch of the state's success to date in reducing GHGs is due to decarbonization of the electricity sector…."[15] The recent Assembly Bill 32 GHG Emissions Inventory report finds the electricity sector has already cut its annual GHG emissions in half, from its peak of approximately 120 MMT in 2001 and 2008 to 60 MMT in 2022.[16] The most recent Preferred System Plan ("PSP") attempts to build on that success by approving a plan to reduce emissions by another 60% to 25 MMT by 2035, which the Commission acknowledges "corresponds to the low (most aggressive) end of the 2030 target range for the electricity sector (30-38 MMT of carbon dioxide equivalent) set by the [CARB] when adopting the most recent Scoping Plan update."[17]

SCE estimates that electric customers could save approximately $2 billion in 2035 by the state adopting an RCPPP GHG target of 30 MMT by 2035, which is still within CARB's electric sector planning target range and consistent with the 90% clean energy target in Public Utilities Code Section 454.53. Further, the Commission must also evaluate the feasibility of a 25 MMT by 2035 target given the significant increase in demand forecast by the California Energy Commission ("CEC") in its latest Integrated Energy Policy Report ("IEPR").[18] SCE therefore

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15 CARB, 2022 Scoping Plan for Achieving Carbon Neutrality, December 2022, at 195, available at: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf.

16 *See* CARB, California Greenhouse Gas Emissions from 2000 to 2022: Trends of Emissions and Other Indicators, September 20, 2024, at 20 (Figure 10), available at: https://ww2.arb.ca.gov/sites/default/files/2024-09/nc-2000_2022_ghg_inventory_trends.pdf.

17 D.24-02-047 at 63.

18 The average demand increase between the 2022 and 2024 IEPR load forecasts is between 5,000 and 10,000 MW. This incremental demand would need to be served entirely by clean energy if the 25 MMT target were to be maintained.

recommends the Commission review and potentially update its GHG targets in this IRP cycle. The Commission can also consider adopting two targets: an aspirational planning target and a more modest RCPPP GHG reduction procurement program target that reflects current market realities and better balances affordability concerns.

3. The Commission Should Establish a Penalty Waiver Process for the RCPPP Reliability and GHG Reduction Programs

For both the RCPPP reliability and GHG reduction programs, the Commission should establish a penalty waiver process where LSEs could seek a waiver of any penalties for failure to timely meet a procurement requirement by showing they exercised best efforts to procure resources but were unable to do so due to circumstances beyond the LSE's control.[19] This flexibility is similar to factors considered by the Commission in the RPS program and for local RA and MTR procurement and will support affordability by enabling LSEs to balance their compliance requirements in an environment that is exerting tremendous upward pressure on prices and where it may be infeasible to meet near-term procurement requirements for reasons beyond LSEs' control. The waiver request should include a detailed description of the solicitations and market engagement conducted by the LSE, and any other outreach to potentially contract bilaterally. The waiver request should also include a plan for how the LSE will continue best efforts to procure to meet its requirements.

For GHG reduction, LSEs should also be able to request penalty waivers based on customer affordability considerations (*e.g.*, if the cost of contracting for the resource was excessively high such that seeking compliance over affordability was unreasonable). If an LSE seeks a waiver due to affordability concerns, the LSE should provide analysis on the cost to procure, including impacts to customers' rates.

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[19] For reliability, allowing LSEs the ability to procure bridge resources for online date delays (see Section III below), similar to the well-established process in MTR, will also provide flexibility for LSEs to meet online date requirements.

The use of penalty waivers related to reliability procurement requirements should be minimized to the extent possible and the waiver process should not be seen or used as a mechanism whereby some LSEs routinely rely on other LSEs or backstop procurement in lieu of procuring. Rather, the existence of a waiver process – especially as it relates to procurement to achieve GHG reduction targets – is a reasonable mitigation measure that helps ensure LSEs are not penalized for reasons beyond their control given the current challenging clean energy procurement environment and the fact that customer rate affordability remains a key consideration.

4. A CES Approach Should Allow Banking

If the Commission adopts a CES approach for the RCPPP GHG reduction program, the program should allow banking of RECs and ZECs across compliance periods consistent with the RPS program. Banking provides incentives for LSEs to procure early by allowing excess RECs and ZECs to be used in a future compliance period and also provides flexibility to account for unexpected changes in load, clean energy generation, and curtailment, among other factors. The Staff Proposal's rationale for not allowing banking in the CES "to ease administrative assessment of compliance" lacks any foundational basis and runs counter to electric rate affordability and market realities.[20] The RPS program has allowed banking for many years without issue and it would be more complicated and administratively inefficient to have overlapping RPS and CES requirements where one program allows banking and one does not.

C. The Commission Should Adopt SCE's Simplified Mass-Based GHG Reduction Program; Alternatively, the Commission Should Adopt an Enhanced CES

The 2023 PSP demonstrates that the system needs a significant and diverse build-out of new clean energy resources to meet the electric sector GHG targets. Accordingly, the key

[20] Staff Proposal at 48.

objective for the RCPPP GHG reduction program should be to bring the needed resources online and allocate the responsibility to all LSEs.

SCE's Alternative Proposal details SCE's proposed simplified mass-based GHG reduction program and describes how it promotes development of the diverse system portfolio needed to meet the state's GHG reduction goals and allocates responsibility to all LSEs. Specifically, an hourly accounting compliance framework accurately and transparently captures resources' contribution to reducing GHG emissions and enforces emissions accountability across LSEs. Further, it is self-governing because the programmatic requirements naturally capture changes to the system emissions rates and LSEs' demand and supply portfolios as they evolve and shift over time.

By contrast, the as-proposed CES prioritizes clean energy output without consideration of load requirements or hours of need. In effect, the CES assigns equal value to all clean energy, regardless of when the energy is actually generated or dispatched. The CES fails to account for the "hourly mismatch" between clean energy and demand – particularly during net peak hours when emitting resources are often relied upon to fill the gap. Additionally, the as-proposed CES fails to equitably allocate responsibility for GHG reductions to all LSEs because some LSEs could continue to rely on others with more diverse portfolios to reduce system emissions.

SCE acknowledges and supports minimizing administrative complexity by aligning clean energy programs where possible. However, given that the as-proposed CES does not structurally require any matching between renewable output and load, the Commission would need to add prescriptive requirements to the CES that function as programmatic guardrails to ensure the clean energy is effective at reducing system GHG emissions. As such, if the Commission decides to adopt a CES for the RCPPP GHG reduction program, it should adopt an "Enhanced CES" program that specifies and regularly updates additional program requirements to

supplement the clean energy percentage of annual retail sales requirements.[21] As described in Section V, given the expectation that the near-term clean energy targets will be largely met with new solar resources, SCE proposes that the Commission first implement a prescriptive storage requirement that ensures the system has sufficient storage to shift the contribution of solar energy to critical hours when the system is reliant on gas resources to meet demand. As conditions evolve over time, the Commission will likely need to use the IRP process to identify other interventions (such as attribute requirements) that are needed to meet emerging system needs and broadly allocate that responsibility to all LSEs.

D. The Commission Should Adopt RCPPP Reliability and GHG Reduction Programs This Year With Further Implementation Details Resolved Through Subsequent Workshops and Comments

The Commission has been considering the development of the RCPPP for several years. Given the lead time necessary to bring new resources online, LSEs are already executing long-term clean energy and capacity contracts to meet future requirements. The Commission authorized the IOUs to begin procuring resources identified in their 2022 IRP filings with the portfolios designed to meet the 25 MMT GHG target by 2035.[22] However, all LSEs need long-term certainty on what their RCPPP procurement requirements will be and how resources will count toward those requirements so they can make the best procurement decisions for their customers. As such, SCE urges the Commission to issue a decision this year establishing the overall frameworks for the RCPPP reliability and GHG reduction programs.

The full implementation details for the RCPPP can be resolved through subsequent workshops, comments, and a second decision if needed. There are some issues that will require further consideration including the final compliance tools and some elements of the mass-based

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[21] SCE's proposal to "enhance" the CES with additional requirements is analogous to the regular and programmatic addition of supplemental RA program requirements (*e.g.*, the addition of Maximum Cumulative Capacity bucket limits).

[22] *See* D.24-02-047 at Ordering Paragraph ("OP") 9.

GHG program or CES as discussed below and in SCE's Alternative Proposal. But the Commission should not delay a decision on the RCPPP framework until every implementation detail is resolved. In fact, the Commission needs to decide the overall approaches for the reliability and GHG reduction portions of the RCPPP before parties can fully consider all implementation issues that may arise in the final programs. If the Commission believes the full RCPPP is not yet ready for adoption, the Commission should prioritize reliability and implement Option II with SCE's proposed minor modification this year to ensure the system remains reliable.

E. The Commission Should Authorize the IOUs to Flexibly Procure to Meet Their RCPPP Procurement Requirements and Establish the Process for Approval and Cost Recovery

The Staff Proposal does not specifically address the IOUs' procurement authority under the RCPPP. SCE requests that the Commission include an IOU procurement authorization in its final decision on the RCPPP that would authorize the IOUs to flexibly procure to meet their procurement requirements under the RCPPP reliability and GHG reduction programs. As with the procurement authorization provided to the IOUs in D.24-02-047, the IOUs should be authorized to conduct procurement activities to meet these requirements as market conditions indicate, including solicitations and bilateral negotiations.[23] The resources procured under this authorization should be submitted to the Commission for approval through Tier 3 advice letters unless the contracts are authorized through another approval mechanism pursuant to another Commission order or proceeding (*e.g.*, through the IOU's Bundled Procurement Plan authority).[24] Finally, unless another cost recovery mechanism is approved pursuant to another Commission order or proceeding,[25] cost recovery for any contracts procured under this

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[23] *See id.*

[24] *See id.*

[25] If the Commission requires the IOUs to procure toward a CCR, then SCE agrees that cost recovery for that procurement should be through the Cost Allocation Mechanism ("CAM"). *See* Staff Proposal at 21.

authorization should be through the applicable PABA subaccount based on the year of contract execution.

III.

SCE'S RESPONSES TO THE RELIABILITY QUESTIONS IN SECTION 5.1 OF THE RCPPP STAFF PROPOSAL

A. 5.1.1 Reliability Option I vs. Option II

5.1.1.1. Which reliability option (i.e., Option I or Option II) should the CPUC adopt? Please explain the justification for the recommended option in detail.

The Commission should adopt Reliability Option II with minor modifications and reject Option I for the reasons discussed below.

1. Option II Helps Ensure System Reliability by Appropriately Requiring All LSEs to Contribute to New Reliability Resource Procurement, While Option I Does Not

The Staff Proposal states that a "well designed procurement program should provide a strong signal for the retention of existing resources and ***the development of new resources needed to ensure reliability***."[26] One of the fundamental purposes of the IRP process is identifying the new resource build-out that is necessary to maintain system reliability and ensuring that such resources are procured by LSEs and brought online. Public Utilities Code Section 454.51(a) requires the Commission to "[i]dentify a diverse and balanced portfolio of resources ***needed to ensure a reliable electricity supply*** that provides optimal integration of renewable energy and resource diversity in a cost-effective manner."[27] Additionally, the Commission shall make certain that LSEs "[e]nsure system and local reliability on a short-term, midterm, and long-term basis, … and require sufficient, predicable resource procurement and

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[26] *Id.* at 14 (emphasis added).
[27] Emphasis added.

development to avoid unplanned energy supply shortfalls by taking into account impacts due to climate change, forecasted levels of building and transportation electrification, and other factors that can result in those shortfalls."[28]

SCE strongly agrees with Staff on the critical importance of developing the new resources needed to maintain system reliability, which also collectively benefits all customers. Grid reliability should never be compromised. The rotating outages in California in 2020 and the grid reliability events in 2022 demonstrate the importance of prioritizing reliability. Moreover, increasing electrification and data center load growth and the effects of climate change will create new challenges for electric system reliability. For example, the 2024 IEPR load forecast estimates 11% higher peak demand and 24% higher total energy than the 2022 IEPR. Staff also noted other recent trends that have changed the market fundamentals, including increased market fragmentation with community choice aggregators serving a large portion of load, increasing capacity market tightness as aging powerplants in California and neighboring states retire due to market and regulatory pressures, and increasingly ambitious GHG-reduction goals.[29] To be effective, the RCPPP must account for these new challenges and market realities and ensure the new reliability resources needed by the system are built as planned, and the responsibility for new reliability resource build-out is shared among all LSEs, as it has been in the past.

Staff acknowledges that new resources have been developed through procurement orders or requirements where responsibility for new procurement was shared among all LSEs – either through IOU procurement orders where costs were allocated to all LSE customers through the CAM, through RPS requirements applicable to all LSEs, or through IRP procurement directives that also applied to all LSEs.[30] For reliability procurement, these procurement orders generally required the procurement of new or incremental resources. In contrast, the RA program, which

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[28] Cal. Pub. Util. Code § 454.52(a)(1)(E)(i).
[29] *See* ALJ Ruling, Attachment B at 5.
[30] *See* Staff Proposal at 9; ALJ Ruling, Attachment B at 6.

focuses on ensuring existing resources are available for system reliability and allows LSEs to meet their RA requirements with existing or new reliability resources, has not resulted in material new resource development. "[T]he RA program is designed to ensure that the resources needed to meet California's electricity demand are under contract and obligated to provide electricity when needed. The IRP program ensures that new resources are built and available to the shorter-term RA program…."[31]

The Commission should adopt Option II because it requires all LSEs to procure the new resources needed to maintain system reliability, which also collectively benefits all customers. In fact, Option II is the only option that has any new resource procurement requirements. Under Option II, LSEs will receive their LSE-specific share of total new resource procurement need up to four years ahead (*e.g.*, receiving a T+4 target in year 0) and are then required to procure those new resources. The explicit new resource procurement requirements in Option II follow the proven approach that has already worked to bring new reliability resources online – establishing requirements to procure new or incremental resources and ensuring the responsibility for that procurement is shared by all LSEs. Therefore, Option II provides assurance that the new resource build-out necessary to maintain system reliability will actually occur, which is particularly important given the lead time necessary to procure, develop, and bring new reliability resources online.

In comparison, there are no explicit requirements for new resource procurement under Option I, which provides that reliability procurement requirements can be met by existing ***and*** new resources. Option I is essentially an extension of the existing RA program, which has not materially contributed to the build-out of new reliability resources. The Commission should not risk reliability on the unproven assumption that an RA-like Option I approach will lead to enough new resource development to maintain system reliability. If the needed new reliability

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[31] CAISO, Commission, CEC, Root Cause Analysis, Mid-August 2020 Extreme Heat Wave, January 13, 2021, at 11, available at: https://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf.

resources are not developed under Option I, there may not be enough lead time to bring those resources online with one-off procurement requirements, putting reliability at risk. As such, Option I should be rejected.

Furthermore, the Commission should adopt Option II because, unlike Option I, it allocates the responsibility for new reliability resource procurement to all LSEs. All customers enjoy the benefits of a reliable grid; therefore, all LSEs should share responsibility for the new resource procurement needed to maintain system reliability. Like in the successful MTR procurement orders, Option II follows this principle by requiring all LSEs to procure new reliability resources based on load share.

Under Option I, some LSEs may be able to meet their reliability procurement requirements primarily (or even entirely) with existing resources while other LSEs, due to the size of their load, may have to procure a disproportionate amount of the new resources needed by the system. Because new resources are more costly than existing resources, this dynamic will create a race among LSEs to be the first to contract for existing resources and result in inequities between LSEs and LSE customers. In particular, LSEs with large procurement requirements would be disadvantaged as smaller LSEs could procure existing resources more quickly and with greater ease. IOU customers would also be disadvantaged because IOU contracts require Commission approval while other LSEs' contracts do not, potentially making it simpler and faster for existing resources to contract with non-IOU LSEs. Including both new and existing resources in the RCPPP reliability program would also increase prices for existing resources, because existing resources will now be competing with new resources, creating pressure for prices of existing resources to converge with those of new resources, pushing prices upwards in the market. Moreover, system reliability could be jeopardized if the LSEs that procure a disproportionate share of the new resources leave the market. Finally, in certain years, Option I allows for contracts to satisfy the requirement. This structure allows LSEs to game compliance through the execution of sham contracts. All LSEs serving load should bear the responsibility to

procure new resources necessary for system reliability because system reliability benefits all customers. Accordingly, the Commission should approve Option II, not Option I.

The RA program already has a compliance structure in place for contracting with existing reliability resources and the RCPPP reliability program should focus on new resources to ensure all LSEs are adding new resources to the grid. However, Option II also addresses retaining existing reliability resources by proposing to expand system RA requirements from year-ahead and month-ahead to multi-year forward requirements that cover up to three years ahead. SCE supports this proposal.

It is not clear, however, whether a multi-year system RA program alone will be sufficient to maintain specific existing generation that may be strategically needed to support reliability during the 20-year transition to 100% of retail sales being served by clean energy resources. Neither Option II nor Option I may be able to fully address this issue. The Commission should consider developing a directed procurement program for maintaining a fleet of existing gas-fired generation that is deemed strategically needed for supporting reliability while continuing to significantly reduce GHG emissions and meet decarbonization goals. Under such a program, generation that opts in would be compensated under an open book cost plus contract. This will allow this generation to continue without allowing these sellers to exert market power. Since retention of existing thermal resources is not an immediate concern, the Commission does not need to wait to develop such a procurement framework before implementing a RCPPP reliability program, such as Option II with the proposed modifications suggested by SCE. But the Commission should begin in earnest exploring various options to retain needed gas-fired resources and not expect a multi-year forward RA program to be a sufficient mechanism.

2. Option II Includes Key Features From the MTR Procurement That Have Proven Successful in Developing New Resources

In an effort to ensure midterm reliability, the Commission issued MTR procurement orders requiring LSEs under the Commission's IRP purview to procure a total of 15,500 MW of

incremental September NQC to come online between 2023 and 2028.[32] Based on Staff's July 2025 summary of MTR compliance by LSEs, 7,449 MW NQC was online through 2024, which is 551 MW less than the 8,000 MW ordered to be online by June 1, 2024.[33] However, factoring in resources procured through MTR, RPS, and other procurement efforts, 17,121 MW September NQC of new reliability resources have come online between January 1, 2020 and May 6, 2025, and nearly 15,000 MW NQC is expected to still come online through 2028.[34]

Despite dynamic and challenging market conditions, interconnection and permitting delays, and other factors, the MTR procurement requirements have been very successful, resulting in a substantial amount of new reliability procurement and development in a short period of time, including thousands of MW of new reliability resources brought online. The central elements of the MTR procurement, including clear and certain incremental resource procurement targets, allocation of those requirements to each LSE, and enforcement mechanisms for online sufficiency have resulted in an effective procurement process.

Option II includes many of the same key features of MTR procurement. Similar to MTR, Option II sets specific procurement targets for new reliability resources, allocates this new resource procurement responsibility to all LSEs, and includes enforcement mechanisms to ensure those new resources ultimately come online according to an established schedule. Conversely, Option I does not build upon the successful elements of the MTR procurement and instead

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[32] *See* D.21-06-035 at OP 1; D.23-02-040 at OP 2. The procurement requirements are measured in September NQC but MTR resource counting is based on a specific ELCC methodology. In addition, LSEs may request an extension of the required online date of the long-lead time portion of their MTR procurement requirements from 2028 to 2031. *See* D.24-02-047 at OP 16-17.

[33] *See* Commission, CPUC Staff Review of LSEs' Compliance with the MTR (D.21-06-035) and Supplemental MTR (D.23-02-040) Decisions, July 2025, at 19, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/compliance-status-reportmid-term-reliability-mtr-and-supplemental-mtr.pdf. This includes both long-term and bridge capacity.

[34] *See* Commission, Resource Tracking Data, April 2025, at 4, 15, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/summer-2021-reliability/tracking-energy-development/resource-tracking-data-april-2025-release.pdf.

leverages the existing RA program, which has not sufficiently ensured new resource procurement needed for system reliability, even with a forward procurement requirement.

As described below, SCE proposes minor modifications to Option II that leverage additional effective elements of the MTR procurement, including eliminating contracting sufficiency penalties but retaining online sufficiency penalties and allowing short-term bridge procurement to account for delays in new resources coming online. SCE also proposes a penalty waiver process that builds on elements of the MTR procurement process. These minor modifications will allow Option II to further align with the design of MTR and replicate its success. Adopting Option II with SCE's proposed modifications will also provide for a smooth transition from the MTR construct to the RCPPP once it is implemented for reliability resource procurement.

3. The Negative Effects of Applying Marginal ELCCs Are Minimized Under Option II Compared to Option I

In the Staff Proposal, both Option II and Option I use marginal ELCC or "mELCC" values for resource counting. As correctly noted in the Staff Proposal, "[s]ignificant changes in marginal ELCCs over time can lead to fluctuations in investment signals, potentially causing uncertainty for LSEs in the market."[35] The Staff Proposal illustrates that marginal ELCC values

[35] Staff Proposal at 39.

can change significantly with each update. Table 1 below compares two recent updates: the values used in the 2022 IRP filings and the indicative values from the Staff Proposal.[36]

Table 1: Marginal ELCCs Display a High Degree of Volatility Over a Short Period of Time

Technology	2022 Vintage mELCC (for 2029)	2024 Vintage mELCC (for 2029)	Delta in mELCC values	Change as % of 2022 Vintage
Solar	8%	16%	+8%	**100%**
4-Hr Battery	85%	37%	-48%	**-56%**
Hydro	53%	75%	+22%	**42%**
Out-of-State Wind	28%	22%	-6%	**-21%**
Offshore Wind	58%	50%	-8%	**-14%**
In-State Wind	12%	11%	-1%	**-8%**
Firm	88%	91%	+3%	**3%**

For this particular update, the change in marginal ELCC values ranges from 3% up to 100% across various technologies. The technologies that saw the largest changes are those with the highest installed capacity on the system, *i.e.*, solar and 4-hour batteries, totaling 36,000 MW

[36] 2022 Vintage mELCC Values are from slide 44 of Reliability Filing Requirements for Load Serving Entities' 2022 Integrated Resource Plans – Results of PRM and ELCC Studies, July 29, 2022, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2022-irp-cycle-events-and-materials/20220729-updated-fr-and-reliability-mag-slides.pdf. 2024 Vintage mELCC values are from Table 5 of the Staff Proposal on page 24, which are indicative values based on the most recent 2023 PSP adopted in 2024. For comparison purposes, the average mELCC value of in-state wind S and in-state wind N for 2022 vintage is compared to a single category of in-state wind for 2024 vintage and the average of out-state wind in WY/ID, WA/OR and AZ/NM for 2022 vintage is compared to a single category of out-of-state wind for 2024 vintage. The Firm category is the average mELCC value for biomass/gas, geothermal, nuclear, CHP, peaker, and CCGT for both vintages.

for 2025,[37] further amplifying the impact. Those are also the dominant technologies in the CAISO interconnection queue, comprising approximately 93% of the current queue.[38]

The practical implications of these marginal ELCC changes are daunting and would make it extremely challenging for LSEs that have recently invested in those two types of clean resources to meet their future reliability procurement requirements, thus resulting in structural winners and losers among LSEs. For example, LSEs that have widely invested (whether voluntarily or through Commission order) in the procurement of 4-hour battery resources to meet system reliability would realize a "penalty" as the updated marginal ELCC values are much lower for this type of resource compared to when the resource was originally procured. In less than three years, the marginal ELCC value for 4-hour batteries dropped from being a top reliability contributing resource at 85%, to a near-bottom reliability contributing resource at 37%, for a net reduction of 48%.

In this scenario, an LSE would now have to procure even more new resources to compensate for the marginal ELCC value loss for those 4-hour batteries, imposing significant additional costs on the LSE's customers. In other words, this structure would negatively impact many LSEs and their customers by requiring them to bear the burden of an unproportional share of new resource procurement that is needed for reliability because of marginal ELCC value changes. This is an irrational and unfair outcome.

This issue is especially problematic with Option I where the marginal ELCC values apply to the entire portfolio of existing and new resources and in essence immediately discount

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[37] Based on the draft 2025 IRP Inputs and Assumptions, there are 23,160 MW of solar and 13,237 MW of 4-hour batteries in 2025 in the CAISO. *See* Commission, Inputs & Assumptions, 2024-2026 Integrated Resource Planning, February 2025, at 28 (Table 19), 33 (Table 27), available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2024-2026-irp-cycle-events-and-materials/2025_draft_inputs_and_assumptions_doc_20250220.pdf. The total capacity of 4-hour batteries and solar is 36,397 MW for 2025.

[38] *See* CAISO, Uncorking the Bottleneck: Addressing Barriers to New Resource Development and Interconnection, at 3, available at: https://cal-cca.org/wp-content/uploads/2025/05/Uncorking-the-Bottleneck.pdf.

resources that the Commission as recently as 2023 ordered LSEs to procure.[39] While bounding of marginal ELCC values may help mitigate the issue, it would require significant bounding to resolve it (*i.e.*, significantly limit how much marginal ELCC values can change from one update to the next). This undermines the intent of using marginal ELCC values, indicating that the marginal ELCC counting under Option I is flawed and unworkable. Although some of the same problems with marginal ELCC counting apply under Option II, the impacts are more limited because marginal ELCC would only apply to new resources as defined under Option II.

4. Option I Creates Inconsistencies With the RA Program and Will Likely Drive Up RA Prices

Under Option I, LSEs would need to show offtake contracts meeting 100% of their reliability procurement requirement at T+2, 75% at T+3, and 50% at T+4 using marginal ELCC values. Setting the T+2 reliability requirement at 100% is not reasonable because it would front run the T+1 RA requirement (*i.e.*, year-ahead RA compliance) that is at 90%. Applying marginal ELCC counting to both existing and new resources under Option I also diverges from the RA program's use of slice-of-day counting. The misalignment can create procurement inefficiencies, leading to over- or under-procurement of some resources and increasing costs to customers.

Moreover, Option I will likely exert upward pressure on already high RA market prices[40] because existing resources will now be more directly competing with new resources, pressuring prices to converge with those of new resources. While this is not an intended outcome of the

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[39] *See* D.23-02-040 at OP 2.

[40] "The weighted average price of system RA in September 2022 was $13.48, which represents a ***357%*** increase over the September 2017 weighted average…. The year-on-year increase in weighted average price between 2021 and 2022 was ***56%*** for September and ***53%*** for August…. These price increases are likely be driven by tight supply conditions attributed to resource retirements, load forecast increases, and changes in counting conventions that have reduced the RA value of certain resources." Commission, 2022 Resource Adequacy Report, May 2024, at 29 (emphasis added), available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/2022-ra-report_05022024.pdf.

Option I proposal, it will be a likely result, leading to higher costs and negatively impacting customer affordability. Adoption of Option II will avoid or mitigate these detrimental issues associated with Option I.

5.1.1.2. Currently, Option I and Option II have not explicitly considered imports. How should imports be considered, if at all, in Option I and Option II?

Under Option II, assumptions regarding unspecified imports and existing specified imports should be treated as part of the existing resource portfolio when determining new resource needs, following the same methodology used in past IRP resource need determinations. Specified imports that meet new resource eligibility criteria should count toward LSEs' reliability procurement requirements, provided they meet certain deliverability standards (*e.g.*, with full or partial deliverability status or meeting RA deliverability standards for imports such as being paired with import allocation rights). Unspecified imports should not count toward LSEs' reliability procurement requirements but may be used as short-term bridge resources to address new resource delays and meet near-term reliability needs, consistent with the bridging relief provided under MTR.

Under Option I, all qualifying resources including unspecified imports should count toward LSEs' reliability procurement requirements, provided they meet RA deliverability standards for imports (*i.e.*, being paired with import allocation rights).

5.1.1.3. In what ways should Option I or Option II be modified prior to CPUC adoption? Are there relevant considerations that are currently not captured in both options?

As addressed in SCE's response to question 5.1.1.1, the Commission should adopt Option II and reject Option I. The Commission should approve Option II with the following minor modifications.

1. Option II Should Be Modified to Eliminate Contracting Sufficiency Penalties

Option II requires an LSE to contract new resources to meet 60% of its reliability procurement requirements at T+4, 70% at T+3, 80% at T+2, and 90% at T+1. The LSE must have 100% of the new resources needed to meet its reliability procurement requirements contracted and online by T+0. Option II would impose a contracting sufficiency penalty of one-half of the net cost of new entry ("CONE") for new procurement only in years T+0 through T+4 if an LSE incurs any contracting deficiency that is not cured within 30 days. Deficiency penalties for online sufficiency at T+0, if not cured, would be set at net CONE. In addition, if an LSE incurs any deficiency penalties for either contracting sufficiency or online sufficiency for three consecutive years, then the deficiency penalty in the fourth year would be twice the net CONE. Finally, in addition to the RCPPP enforcement on contracting sufficiency, LSEs would be subject to penalties under the multi-year RA program for slice-of-day obligations under the current RA penalty structure for years T+0 through T+3 that covers both existing and new resources. Both Option II and Option I also include administrative penalties for late or inaccurate filings.

While SCE strongly supports Option II and does not oppose online sufficiency or administrative penalties, the Commission should not implement contracting sufficiency penalties as proposed by Staff, as this additional penalty is overly punitive and will not ensure resources come online when required. The only penalty structure needed to ensure that resources come online when required is the online sufficiency penalty. This type of enforcement structure has worked successfully for the MTR procurement, where LSEs are subject to potential penalties if resources do not begin commercial operations by the required online date but are not subject to contracting sufficiency penalties. Similarly, the RPS program subjects LSEs to potential penalties if LSEs do not have enough RECs to meet their compliance period targets but LSEs are not subject to contracting sufficiency penalties. Adding a contracting sufficiency penalty does not ensure the resources timely come online. An LSE could avoid contracting sufficiency

penalties by simply signing contracts that do not have strong incentives to assure developer performance, such as requiring liquidated damages, withholding project collateral, and retaining buyer termination rights if sellers miss online date deadlines. In other words, an LSE can easily game contracting sufficiency requirements to avoid these types of penalties without ensuring resources come online.

Moreover, if contracting sufficiency penalties are retained, LSEs could be penalized multiple times for the same deficiency. For instance, if an LSE falls short in meeting the T+4 target in the current year compliance filing and falls short again in meeting the T+3 target in the next year's compliance filing, under Option II the LSE will be penalized twice for the same forward year even if it ultimately met its procurement obligations. The LSE could be penalized five times for contract insufficiency arising from the need for the same year. Similarly, for T+0 through T+3, LSEs could be penalized for contracting sufficiency in both the RCPPP reliability procurement program and the expanded RA slice-of-day program. It also appears that LSEs may face potential penalties for both contracting sufficiency and online sufficiency in the RCPPP reliability procurement program for T+0. Penalizing LSEs multiple times for the same deficiency is unreasonable and unnecessary, as shown by the success of the MTR procurement. Therefore, Option II should be modified to eliminate contracting sufficiency penalties.

As it does with the MTR procurement, the Commission can monitor LSEs' procurement progress under Option II without the need for contracting sufficiency penalties. LSEs will be submitting two compliance filings per year that report on their procurement progress, including providing the contracts for new resources and interconnection agreements starting at T+2. If the Commission is concerned with an LSE's procurement progress, it can request additional documentation.

2. Option II Should Be Modified to Allow Short-Term Bridge Procurement to Account for New Resource Delays

For the MTR procurement, the Commission has allowed LSEs to procure short-term bridge resources to cover delays in their MTR projects coming online. In D.21-06-035, the Commission permitted LSEs to cover the risk of delay in a project online date by contracting for other capacity to act as a "bridge" until the contracted-for resources can come online.[41] In D.23-02-040, the Commission expanded on the requirements for MTR bridge resources, establishing that firm imports from any resources could serve as bridge resources for the generic capacity requirements of D.21-06-035 and D.23-02-040 for a term no longer than three years, and allowing resources from other counterparties than the developer of the primary resource to serve as bridge resources.[42] Though the Commission initially determined in D.23-02-040 that bridge resources could not be used to meet the Diablo Canyon replacement or long lead-time resource MTR procurement requirements, the Commission subsequently allowed the use of bridge resources to meet both sets of requirements in D.24-09-006 and D.24-02-047, respectively.[43]

When permitting the use of firm imports to serve as bridge resources, the Commission described the basic concept as "to allow for additional development time for new resources to come online ***without compromising short-term reliability***…."[44] The Commission found that "[a]llowing imports from bridge resources (existing resources) contracted until a new resource has time to come online, if the imports used for bridge purposes meet current resource adequacy requirements at the time the contract is executed, will help enhance electric grid reliability" and permitted the use of bridge resources for "enhanced reliability purposes."[45] The Commission

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41 *See* D.21-06-035 at 70, OP 10.
42 *See* D.23-02-040 at 40-41, OP 8.
43 *See* D.24-09-006 at OP 1 (permitting bridging of Diablo Canyon replacement requirements); D.24-02-047 at OP 19 (permitting bridging of long-lead time requirements).
44 D.23-02-040 at 39 (emphasis added).
45 *Id.* at Finding of Fact 12, OP 8.

was prudent to permit bridging of MTR resources in a manner that would not compromise short-term reliability given the system emergency events of 2020 and 2022.

To leverage the MTR design, the same bridging mechanism should be allowed in the RCPPP reliability program. Bridge procurement is needed because the same challenges facing LSEs and developers in the MTR procurement have persisted, if not worsened with the accelerated phase-out of federal tax credits, tariff uncertainties, and permitting and interconnection delays as discussed herein. LSEs should be allowed to use bridge resources to meet their reliability procurement requirements at T+0, and as with the MTR procurement, LSEs should be allowed to use short-term bridge resources toward those requirements for up to three years. Like for the general MTR capacity requirements and the MTR long-lead time requirements, LSE should be able to procure bridge resources from any counterparty that either meet the same eligibility criteria for meeting the reliability procurement requirements (*i.e.*, new resources for Option II) or to use imported energy from any resource so long as the bridge contract for imported energy meets RA requirements at the time of contract execution.[46]

In its pending Petition for Modification of D.23-02-040 and D.24-02-047, SCE proposed changes to the MTR bridging requirements for the lower demand non-Q3 months of October through June that would provide cost saving to customers without compromising reliability.[47] SCE proposed that the Commission should modify those decisions to provide that any LSE who has executed long-term contracts to meet their generic capacity or long-lead time MTR procurement requirements is not required to procure any bridge resources, and will not be penalized, for the non-Q3 months before their long-term resources come online, so long as the LSE met their month-ahead system RA requirement for that month by the final deadline for curing any RA deficiency. If the Commission grants SCE's Petition for Modification, then the Commission should also extend these changes to the MTR bridging requirements to the RCPPP

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[46] *See id.* at OP 8; D.24-02-047 at OP 19.

[47] *See* Southern California Edison Company's Petition for Modification of Decisions 23-02-040 and 24-02-047, R.20-05-003, March 21, 2025.

reliability procurement program so that LSEs are not required to procure bridge resources in non-Q3 months as long as they met system RA requirement for that month.[48]

3. Option II Should Be Modified to Establish a Penalty Waiver Process to Account for LSEs' Procurement Efforts

As addressed in Sections II and IV, there are many challenges currently making it difficult to develop the diverse and clean resources needed by the system. While these challenges are particularly daunting with respect to the clean energy resource development needed to achieve California's GHG reduction and clean energy goals, they also affect reliability procurement. Therefore, the Commission should establish a penalty waiver process that applies to the RCPPP reliability program as well as the RCPPP GHG reduction program. The waiver process would provide LSEs with the ability to request the Commission waive penalties if the LSE can demonstrate they used best efforts to procure resources to meet their procurement requirements, but for reasons beyond their control, could not contract for the resources.

This proposed penalty waiver process is similar to factors considered in assessing potential penalties in other procurement programs. Although the MTR procurement does not have a specific penalty waiver process, the Commission recognized that "LSEs may make all good faith efforts to procure the required resources and simply be unable to for reasons beyond their control."[49] The Commission stated it "will consider deficiencies and non-compliance on a case-by-case basis, taking the LSE's efforts and all relevant exogenous factors into account."[50] Similarly, in assessing whether to grant LSEs' extensions of their MTR long-lead time procurement requirements, the Commission considers LSEs' good faith efforts to procure and finds it legitimate for LSEs to seek extensions on the basis of high, non-competitive, or

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[48] If the critical reliability months are different than the Q3 months in the future, the Commission could modify the requirements so that LSEs are not required to procure bridge resources in non-critical months as long as the LSE met their month-ahead system RA requirement for that month.

[49] D.23-02-040 at 36.

[50] *Id.*

unreasonable pricing in the bids received.[51] The Commission's RA program also has a local RA waiver process whereby LSEs can seek a waiver of local RA penalties based on a demonstration of their reasonable and good faith procurement efforts and a demonstration that they received no bids, received no bids under certain price thresholds, or only received bids with unreasonable terms and conditions.[52] Additionally, the RPS program allows the Commission to waive enforcement if it finds that an LSE demonstrated one of several conditions that are beyond the control of the LSE and prevent the LSE from meeting compliance.[53]

The waiver request should include a detailed description of the solicitations and market engagement conducted by the LSE, and any other outreach to potentially contract bilaterally for resources. The waiver request should also include a plan for how the LSE will continue its best efforts to procure to meet its requirements.

5.1.1.4. How should Option I or Option II incentivize re-powers?

SCE interprets this question as asking whether the RCPPP design should provide extra incentives to re-powers and if so, how re-powers should be incentivized. Re-powers should be treated fairly under the RCPPP, but there should not be special incentives specifically for re-powers. Instead, re-powers should only occur if they are economical. The RCPPP should not provide extra incentives to re-powers that are not available to other resources.

Re-powers should be allowed to count as new resources under Option II if they meet certain conditions. If a resource undergoes facility upgrades resulting in incremental capacity for the resource, then the incremental capacity should be allowed to count as new. If a resource retires and then rebuilds, the full capacity of the rebuilt resource should qualify as new, since that rebuilt resource has extended its useful life beyond what was originally counted. In the need determination, the retired resource would be removed from the existing resources (thus

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51 *See* D.24-02-047 at 100-102, OP 16-17.

52 *See* Commission, 2025 Resource Adequacy and Slice of Day Guide, March 27, 2025, at 73-75, available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/resource-adequacy-homepage/resource-adequacy-compliance-materials/guides-and-resources/2025-ra-slice-of-day-filing-guide1-32725.pdf.

53 *See* Cal. Pub. Util. Code § 399.15(b)(5).

increasing the need for new resources) and the rebuilt resource would be eligible for counting as a new resource after being contracted with LSEs.

Since Option I covers both existing and new resources, no specific conditions are needed for re-powers to be eligible to meet RCPPP reliability procurement requirements, although re-powers should be properly treated in the modeling. For instance, as in Option II, if a resource retires and is rebuilt, the retired resource should be removed from the existing resources and the rebuilt resource would be eligible for counting as a new resource after being contracted with LSEs.

5.1.1.5. Should demand response count towards RCPPP compliance? If so, should it be included in Option I, Option II, or both?

Under both options, existing demand response ("DR") resources should be included as part of the existing resources in the need determination. Existing and new DR resources that meet RA requirements should be eligible to meet the RCPPP reliability procurement requirements under Option I, which covers both existing and new resources. Only new DR resources that meet RA requirements should be eligible to meet RCPPP reliability procurement requirements under Option II.

B. 5.1.2 Alternate Timelines for Reliability Procurement

5.1.2.6. Is the proposed timeline for reliability procurement reasonable, or are there alternate timelines that should be considered?

SCE supports the proposed timeline for RCPPP reliability procurement although the Commission should eliminate contracting sufficiency penalties under Option II as discussed in response to question 5.1.1.3. The timeline of an extended RA program should follow the same timeline of the existing RA program as proposed by the Staff.

5.1.2.7. Should compliance filings occur once or twice a year?

SCE supports the proposal for twice-yearly compliance filings – a non-binding filing in December and a binding filing in June.

5.1.2.8. Should enforcement of contracting sufficiency occur once or twice a year?

The Commission should eliminate contracting sufficiency penalties under Option II as discussed in response to question 5.1.1.3. To the extent that the Commission includes any contracting sufficiency penalties in the RCPPP reliability program, they should only be enforced once per year in the binding compliance filing in June.

5.1.2.9. Should enforcement of online sufficiency occur once or twice a year?

As with the MTR procurement, online sufficiency enforcement should only occur once in the binding compliance filing in June at T+0.

C. 5.1.3 To Bound or Not to Bound?

5.1.3.10 Should marginal ELCCs be bound? What are advantages or disadvantages to doing so, if any, in addition to those described in Section 3.1.6.4?

Marginal ELCCs should be bound to mitigate the effects of the significant fluctuations in their values as discussed in response to question 5.1.1.1. Marginal ELCC values can change significantly with each update. For example, compared to the marginal ELCC values used in the 2022 IRP filings, the indicative ELCC values from the Staff Proposal changed between 3% to 100% across various technologies. The largest changes were for solar (100%) and 4-hour batteries (56%), which are dominant technologies comprising approximately 93% of the current CAISO interconnection queue. Without bounding, these large swings in marginal ELCC values will make it extremely difficult for LSEs to plan and procure to meet their reliability procurement requirements. Therefore, bounding is necessary to mitigate some of those impacts and provide some level of certainty for LSE procurement as discussed below.

1. Fixing Marginal ELCCs Within T+3

Under both Option I and Option II, Staff proposes that RCPPP need allocations will remain fixed within T+2. To provide the necessary certainty for LSEs, marginal ELCC values should be fixed within T+3. An additional year of fixed marginal ELCC values above the time window when the target is fixed is necessary because it provides an additional year of certainty

for LSEs' procurement. For instance, if an LSE is allocated a 100 ELCC MW reliability procurement requirement two years ahead (*i.e.*, within T+2) without fixing the marginal ELCC values within T+3, the LSE will not be able to determine the exact nameplate capacity it needs to procure to meet the 100 MW within T+3.[54] This makes procurement planning very difficult and will cause LSEs to either over- or under-procure to meet their compliance obligation, which is a moving target. This will expose LSEs to potential penalties for falling short for reasons outside their control or cause customers to pay more as LSEs will over-procure to avoid penalties.

As shown in the illustrative example below, when marginal ELCC values are not fixed or bounded, there is a great risk of a large quantity of last-minute procurement that is often costly and may not even be feasible due to the lead time necessary to bring new resources online. Therefore, marginal ELCC values should be fixed for T+2 and T+3 under Option I and for T+0 through T+3 under Option II. In addition, fixing ELCC values within T+3 aligns with the three-year ahead local RA procurement timeline and the proposed expanded three-year ahead system RA requirements under Option II.

2. Bounding Marginal ELCCs for T+4 and T+5 at a 5% Threshold

RCPPP obligations cover up to and including T+4 under both Option I and Option II, with informational targets for T+5 through T+9. Marginal ELCC values should be bounded for T+4 and T+5 under both Option I and II to provide certainty for LSEs and allow them to appropriately plan to meet their RCPPP procurement requirements. Without bounding, it will be difficult for LSEs to manage their procurement position when updated marginal ELCC values change significantly. Similarly, without bounding, it will be difficult for LSEs to determine the amount of necessary procurement of different technologies if a substitution or bridging is needed to meet the LSE's requirements (*e.g.*, when a contracted resource is no longer viable or

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[54] Fixing ELCC values within a three-year time window is needed to provide more certainty not only to meet contracting sufficiency requirement under the Staff Proposal, but also to meet online sufficiency requirements, recognizing that under SCE's proposal contracting sufficiency penalties are eliminated under Option II.

significantly delayed). Bounding the marginal ELCC values for T+4 and T+5 does not provide full certainty in addressing these issues, but it will help LSEs more effectively manage their procurement positions. Bounding the marginal ELCC values starting in T+5 will provide an additional year of certainty for LSEs to plan and procure to meet their T+4 RCPPP obligation under the Staff Proposal.

3. Illustrative Example

To demonstrate the need for bounding marginal ELCC values, consider an illustrative example using the year 2032 under Option II. When marginal ELCC values are not bounded, the latest available values at the time of a compliance filing will be used to meet contracting sufficiency and online sufficiency requirements as applicable. This will create significant risks for LSEs when marginal ELCC values change dramatically.

Suppose the marginal ELCC value for a specific technology drops from 50% at T+5 to 15% at T+0 (used for T+0 online sufficiency compliance). For an LSE that procures a 1,000 MW nameplate resource at T+5, the LSE would need to procure additional capacity each year from T+4 to T+0 in order to compensate for the loss in the marginal ELCC MW value of the original procurement at T+5 due to the marginal ELCC value decline. Under this example, the LSE would need to procure an additional 2,333 MW of the same technology, which far exceeds the capacity of the original procurement at T+5.[55] This is not an extreme example. In fact, with an interconnection queue that is 93% solar and battery storage, one can easily see how the marginal ELCC values will drop significantly as more of these resources are contracted, as has occurred in the past few years since MTR procurement began. In other words, even if the 1,000 MW procurement at T+5 being planned and procured at T+5 by the LSE would be sufficient

[55] Although in reality the volume of additional procurement could be higher or lower depending on resource mix in an LSE's portfolio and potential changes in the marginal ELCC update, given the observed decline in marginal ELCC values for 4-hour batteries, this issue likely impacts many LSEs. In addition, even if LSEs would like to procure different technologies that have a higher marginal ELCC value, those technologies may not be readily available – as currently demonstrated by the significant amounts of only solar and storage resources in the CAISO interconnection queue.

based on the marginal ELCC value released at T+5, the change in the marginal ELCC values would require the LSE to procure additional capacity that far exceeds the volume that was anticipated at T+5.

To mitigate uncertainty and risk, the marginal ELCC values should be fixed within T+3, and should be bounded within 5% for T+4 and T+5. While bounding marginal ELCC values does not completely address the underlying issue, it will provide more certainty and lower the probability of extreme procurement outcomes. In this example, assuming marginal ELCC values are bounded within 5% from the previous update for T+4 and T+5, and fixed within T+3, the additional procurement will be much lower, dropping from 2,333 MW to 108 MW.[56] This provides more certainty to the LSE and helps to mitigate the need for last-minute procurement, which is costly for customers and may be infeasible. A threshold of 5% for bounding is necessary to effectively limit additional procurement for an LSE due to marginal ELCC value changes.

[56] When marginal ELCCs are not bounded for T+5 or the threshold for bounding is above 5%, the amount of additional procurement required to compensate for the ELCC loss can be large enough that it may be hard to timely procure for the shortfall in a cost-effective manner.

Table 2: Marginal ELCC Bounding Illustrative Example

ELCC Publication RCPPP Cycle	RCPPP Obligation	ELCC Value Prior to Bounding (Ex: for 1,000 MW Procured in T+5)		Additional Procurement Required with Unbound ELCC		ELCC Value After Bounding (Ex: for 1,000 MW Procured in T+5)		Additional Procurement Required with Bound ELCC	
	Year of Obligation (Y2032)	ELCC %	ELCC MW	ELCC MW Gap	Incremental Procurement (Nameplate)	Fixed & 5% Bounded ELCC %	ELCC MW	ELCC MW Gap	Incremental Procurement (Nameplate)
2026-2027	T+5	*50%*	500 MW	-	-	*50%*	500 MW	-	-
2027-2028	T+4	*35%*	350 MW	150 MW	429 MW	*47.5%*	475 MW	25 MW	53 MW
2028-2029	T+3	*30%*	300 MW	71 MW	238 MW	*45.1%*	451 MW	25 MW	55 MW
2029-2030	T+2	*25%*	250 MW	83 MW	333 MW	*45.1%*	451 MW	-	-
2030-2031	T+1	*20%*	200 MW	100 MW	500 MW	*45.1%*	451 MW	-	-
2031-2032	T+0	*15%*	150 MW	125 MW	833 MW	*45.1%*	451 MW	-	-
Total					***2,333 MW***				***108 MW***

In the table above, the Additional Procurement Required represents the amount of additional procurement of the same technology in each subsequent RCPPP cycle that is needed in order to make up for the loss in the marginal ELCC MW from the original 1,000 MW (nameplate) capacity that is procured at T+5. ELCC MW Gap and Incremental Procurement are derived after accounting for additional amounts procured in the prior RCPPP cycles.

In summary, marginal ELCC values should be fixed within T+3 and bounded within 5% for T+4 and T+5 to provide certainty for LSEs' planning and avoid large amount of last-minute procurement that will likely be costly and may not be feasible. SCE is also open to considering further restrictions on marginal ELCC value changes. This could include lowering the 5% threshold, restricting marginal ELCC value changes annually in addition to in-between updates, potentially locking marginal ELCC values for all RCPPP obligation years, and any other restricting mechanisms identified by parties. The Commission should also direct Energy Division staff to assess the impacts of marginal ELCC value changes and their impact on LSEs' ability to meet RCPPP procurement obligations and make adjustments as necessary. Failure to meet RCPPP procurement requirements due to significant changes in marginal ELCC values should also be a consideration if an LSE seeks a penalty waiver because of this issue.

5.1.3.11. If marginal ELCCs are to be bound, should the degree of bounding differ between Option I and Option II?

As discussed above, SCE strongly recommends that, at a minimum, the marginal ELCC values should be bound by 5% between publications for T+4 and T+5. This means that marginal ELCC values should not be allowed to change more than 5% from the values obtained from the previous publication, whether upward or downward. Additionally, these values should be fixed within T+3. These restrictions should apply under both Options I and II. This approach will provide more certainty for LSEs to plan their procurement, mitigate issues due to fluctuations in marginal ELCC values that may make it infeasible to comply with RCPPP reliability procurement requirements, and reduce potential last-minute procurement that is often costly and inefficient.

D. 5.1.4 Months of Forward Contracting

5.1.4.12. How many months, and which months, should forward contracts include to ensure reliability while minimizing costs if resources can sell to other non-CPUC jurisdictional LSE buyers in other months?

SCE agrees with the Staff Proposal that forward contracts should include the months of highest need. In addition to the months of May through September as suggested in the Staff Proposal, forward contracts should also cover the month of October, which can have a higher load than the month of May.[57] The exact months could be subject to change by the Commission as the overall system resource portfolio evolves in the future. As addressed above for Option II, short-term bridge procurement should be allowed under both Option I and II (*i.e.*, the Commission should allow LSEs to contract for other resources if the contracted resource's online date is delayed, similar to what is allowed under MTR).

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[57] *See, e.g.*, CAISO, 2025 Summer Loads and Resources Assessment, May 5, 2025, at 8 (Table 1.3), available at: https://www.caiso.com/documents/2025-summer-loads-and-resources-assessment.pdf.

E. 5.1.5 Buffer Percentage

5.1.5.13. How much more reliable should the system be compared to the 1-day-in-10-year LOLE? Is a buffer of 2.5% a reasonable value? If not, what is an appropriate percentage value for the buffer?

SCE opposes any buffer for the RCPPP reliability program. The Staff Proposal fails to justify why the system should be built to exceed a 1-day-in-10 year (0.1) LOLE standard and the proposed 2.5% buffer level is arbitrary and lacks analytical justification for its adoption. The 0.1 LOLE standard is a NERC-established industry standard that appropriately considers a range of factors such as demand profiles, wind and solar profiles, and randomized forced outages to calculate the likelihood of supply shortfalls. If the Commission wishes to consider a new LOLE level that deviates from the industry standard, it should do so in the appropriate forum and perform probabilistic analysis to estimate the customer cost impacts associated with increasing levels of reliability.

Customers should not be exposed to the significant cost of over-procurement to meet an arbitrary buffer target. Additionally, the impact of development risks and other potential causes of insufficient resources being online can be addressed through other mechanisms such as short-term bridge procurement without adding the costs of a 2.5% buffer to all LSEs' reliability procurement requirements.

5.1.5.14. How should the affordability impact of the buffer be weighed against its reliability benefit?

As discussed above, the cost and benefits of an additional buffer can only be evaluated via probabilistic analysis. The Commission should perform such an analysis before considering any buffer.

5.1.5.15. Should the buffer apply to both Option I and Option II? Why or why not?

Without a proper probabilistic analysis and an opportunity for parties to respond to any analysis, no buffer should be applied under either Option I or II.

5.1.5.16. Should the buffer percentage differ between Option I and Option II? Why or why not?

Without a proper probabilistic analysis and an opportunity for parties to respond to any analysis, no buffer should be applied under either Option I or II.

F. 5.1.6 CCR Percentage

As described in SCE's response to question 5.1.5.13, SCE opposes a buffer and does not believe the Commission should aim to exceed a 0.1 LOLE standard without consideration of the cost associated with increasing levels of reliability. Nevertheless, if the Commission disagrees and orders a buffer, it should do so through an IOU-procured CCR.

SCE proposes the CCR largely mirror the effective planning reserve margin ("PRM") framework for RA today, where IOUs procure for their transmission access charge areas only and allocate the cost to all LSE customers through the CAM. Further, like the effective PRM framework, the CCR buffer should not be ordered under a central procurement entity ("CPE") framework because there is no need to have a separate structure. Forcing the IOUs[58] to procure the CCR buffer under their current local RA CPE frameworks will make it difficult for IOUs to compete with other non-IOU LSEs who are procuring to meet their requirements because the IOUs' current competitive neutrality rules generally do not allow them to procure the same products at the same time in competing solicitations. This means the IOUs would have to complete their procurement to meet their bundled requirements before beginning to procure for the CCR buffer.

5.1.6.17. At what percentage should the CCR be set?

At a minimum, the Commission must consider the cost of such additional procurement before it adopts a specific CCR requirement. Even at the lowest 1.5% end of the range proposed

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[58] SCE and PG&E are the only IOUs who are designated as CPEs for local RA, so SDG&E would have to develop a similar CPE framework as SCE's and PG&E's if the Commission were to order the CCR to be procured through a CPE framework.

by Staff, SCE estimates the CCR would translate to 785 MW ELCC in 2029[59] and cost approximately $312 million annually.[60]

5.1.6.18. Is the range of 1.5% to 3% of the initial RPN appropriate? If not, what is an appropriate range?

See SCE's response to question 5.1.6.17.

5.1.6.19. Should the CCR percentage differ between Option I and Option II? Why or why not?

No, if the Commission adopts a CCR, the percentage should not differ between Options I and II. There is no basis for the CCR to differ between the two reliability options.

G. 5.1.7 Incorporating Centrally Procured Resources

5.1.7.20. Which option, as presented in Table 11, is better for incorporating new eligible centrally procured resources into RCPPP? What are additional pros and cons of each option?

The RCPPP need determination should fully account for centrally procured resources. IOU CAM resources, IOU DR, and IOU local RA CPE procurement should be allocated to LSEs as it is currently done. No different treatment is necessary under the RCPPP. For instance, those resources are currently allocated to LSEs for LSEs' IRP and RA filings and should continue to be allocated to LSEs for RCPPP.

For long lead-time resources to be centrally procured by the Department of Water Resources ("DWR"), procurement will likely occur concurrently with RCPPP. DWR is expected to begin procuring in late 2026 through late 2030, with resources coming online between June 2031 through June 2037 depending on the solicitation.[61] As such, the need determination for RCPPP should assume the full amount that is authorized to be procured by the DWR and be

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[59] This is 1.5% of Staff's estimated 52,317 MW ELCC reliability procurement need for 2029. *See* Staff Proposal at 19.

[60] SCE's estimate assumes the CCR is met with 4-hour battery storage. Cost assumptions are from the 2023 PSP and the marginal ELCC estimates use the 37% in 2029 from the Staff Proposal.

[61] *See* D.24-08-064 at 64-66.

subtracted from the need determination before the need is allocated to LSEs (*i.e.*, taken off the top). This approach is needed for both the reliability and GHG reduction portions of RCPPP. This treatment is necessary to avoid over-procurement since LSEs will be procuring for RCPPP at the same time the DWR will be procuring long-lead time resources as the CPE. This also avoids a complicated process in coordinating and allocating DWR procurement to LSEs while meeting LSEs' bi-annual compliance filing timeline, given that both the DWR and LSEs may be procuring at the same time. Further, by assuming the DWR procurement amount and taking it off the top, it avoids the need to track resource status, online dates, and any need for potential substitution.

The Staff Proposal includes two options: A) allocating centrally procured resources after RCPPP need determination; or B) allocating centrally procured resources before RCPPP need determination.[62] SCE believes Option B is superior to Option A due to its simplicity relative to Option A. However, without subtracting the full amount of potential DWR procurement before allocating the need to LSEs during the need determination phase, both options pose a risk of potential redundancy in procurement. Option B also eliminates the complicated process of coordinating and allocating DWR procurement to LSEs in order to meet strict bi-annual compliance filing deadlines.

IV.

SCE'S GHG FLEXIBLE COMPLIANCE PROPOSAL

A. There Are Major Challenges to Near-Term Diverse and Clean Resource Development That Will Significantly Increase Costs to Customers

Despite the MTR procurement orders' success in developing new resources, SCE has seen significant delays in bringing resources online due to interconnection and permitting-related issues. Further, as noted above, the CAISO interconnection queue is heavily concentrated

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[62] *See* Staff Proposal at 51.

(approximately 93%) with solar and storage resources, illustrating the lack of clean firm and other diverse resources in the queue that will be needed to shift energy to non-solar hours to meet GHG reduction targets. The market has also experienced delays due to supply chain constraints and price volatility of batteries, among other issues. Many of these market constraints remain today, along with several new challenges.

The elimination of federal tax credits for wind and solar resources placed in service after December 1, 2027 under the One Big Beautiful Bill Act ("OBBB") signed into law on July 4, 2025 is causing some projects to lose their expected tax credits and pass that added cost to LSEs, ultimately shifting the cost burden to customers.[63] In addition, the OBBB has implemented restrictions on claiming investment tax credits ("ITCs") and production tax credits ("PTCs") if projects source materials or use equipment manufactured in countries designated as prohibited foreign entities ("PFEs"). With the vast majority of the supply chain of solar panels and battery cells coming from China, one of the PFEs identified within the OBBB, SCE is expecting further cost pressures for renewable generation and energy storage developers. This is all in addition to the disruptions and cost increases of the on-again-off-again threat of increased tariffs for certain countries. These market impacts and uncertainties greatly affect the viability of projects, the ability to meet clean energy targets, and will significantly increase costs to customers, highlighting the need for flexible compliance in the RCPPP GHG reduction program as further discussed below.

SCE estimated the impact of these compounding challenges by leveraging the analysis detailed in Section II.A of SCE's Alternative Proposal. Specifically, SCE estimated the cost of those capacity expansion-identified portfolios using the Commission's latest IRP cost assumptions.[64] While there may be a gap compared to actual market costs – particularly given

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[63] Wind and solar projects can also retain tax credits if they start construction by July 4, 2026.

[64] Available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2024-2026-irp-cycle-events-and-materials/assumptions-for-the-2025-2026-tpp/resource-cost-workbook--2025-draft-ia-mag.xlsx.

the uncertainty around tax credit and tariff impacts – SCE estimates these emerging issues will likely increase customer costs by approximately $8 billion per year on a CAISO system level by 2035 and thereafter as shown in Table 3 below.[65] This is in addition to the cost of new resources needed to meet the 25 MMT GHG target. To be clear, these significant cost impacts will be experienced much earlier than 2035, which is why flexible compliance is needed upon adoption and implementation of the RCPPP. However, SCE is providing 2035 numbers so that publicly-available information can be leveraged and utilized to provide the magnitude of the issue.

Table 3: 2035 Estimated Cost Impacts for CAISO System and SCE (Illustrative Only)

Cost Component	CAISO System Annual Cost for 2035 (Billion $)	SCE's Share (~30%) (Billion $)	Estimated Impact to SCE's Current Procurement Cost[66]
Base Cost of New Resources to meet 25 MMT Target	$10.4	$3.1	69%[67]
--Additional Cost: Limited Resource Types in CAISO Queue	$2.1	$0.6	
--Additional Cost: Loss of Tax Credits	$4.0	$1.2	
--Additional Cost: Tariff Exposure	$1.8	$0.5	
Additional Cost Impact	**$7.9**	**$2.4**	**52%**

Transitioning from an optimized, diverse portfolio to one limited by the resources in the current CAISO interconnection queue is estimated to increase system costs by an annual amount that will reach at least $2 billion by 2035 and continue thereafter. The lack of resource diversity in the queue could increase the required new resource build-out from 40 GW to 60 GW of solar,

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65 The workpapers for SCE's analysis are included as Appendix A.

66 These percentages are calculated using SCE's 2025 Energy Resource Recovery Account ("ERRA") Forecast estimate of fuel and purchased power net costs for 2025, which totaled $4.5 billion.

67 SCE is providing this comparison as illustrative only to provide context. This percentage increase reflects the estimated impact to SCE's current fuel and purchased power net costs based on SCE's capacity expansion-identified portfolio to meet the 25 MMT GHG target using the 2024 IEPR load forecast. It does not represent a rate impact in $/kWh. Additionally, because SCE is using a public amount from its 2025 ERRA Forecast proceeding, the $3.1 billion and $4.5 billion (noted in the footnote above) are not an exact apples-to-apples comparison. Some contract costs currently in the $4.5 billion would end as earlier contracts terminate and those would be replaced by some of the contract costs that make up the $3.1 billion. The $4.5 billion also includes other costs beyond renewable costs and is net of forecast market revenues while the $3.1 billion is purely costs associated with the capacity expansion modeling.

and from 12 GW to 32 GW of storage between now and 2035, nearly three times the existing capacity for both solar and storage. If the assumed centrally procured clean firm resources (geothermal, pumped storage, offshore wind) in the resource build-out are not available in the market, and procurement is limited to solar, wind, and battery resources only, the required build-out would be significantly higher than modeled – further driving up costs.

Moreover, the phase out of federal tax credits for solar and wind projects could increase CAISO system costs annually by an additional $4 billion in 2035 and beyond, based on the Commission's IRP cost assumptions. The cost increases may begin as soon as 2030 based on the current safe harbor rules, but could be even earlier given the revised safe harboring rules from the July 7, 2025 Executive Order "Ending Market Distorting Subsidies For Unreliable, Foreign Controlled Energy Sources," which directs the Secretary of the Treasury to issue new and revised guidance concerning the "beginning of construction."[68] In addition, SCE estimates an additional $1.8 billion in annual CAISO systemwide costs due to tariff exposure on solar and battery storage projects.[69]

Finally, the actual resource build-out required to achieve policy goals may be significantly higher than currently modeled because of transmission constraints. As California's electric grid becomes increasingly saturated with renewable resources, delivery constraints and local congestion will intensify. Without sufficient deliverability, clean resources may be unable to dispatch when needed, leading to higher curtailment levels. This growing risk of curtailment implies that LSEs may need to overbuild resource capacity – procuring significantly more resources just to achieve the same GHG emissions reductions. That, in turn, increases both systemwide costs and development pressures, especially in regions with limited interconnection capacity.

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[68] Available at: https://www.whitehouse.gov/presidential-actions/2025/07/ending-market-distorting-subsidies-for-unreliable-foreign%E2%80%91controlled-energy-sources/.

[69] SCE's estimate assumes 50% of the solar and battery storage cost will be exposed to a 30% tariff-related increase.

The cost impacts presented here do not exhibit a one-to-one relationship, or perfect correlation, with customer rates. There are also other factors at play. As discussed in SCE's Pathway 2045,[70] with increased electrification, customers will save money on other fuel costs. With increased electrification, energy burden is also anticipated to decline as a result of more efficient energy consumption and the ability to spread fixed costs of electricity delivery over a larger number of volumetric units.

However, the illustrative cost impacts estimated here underscore the importance of designing a flexible compliance framework that accounts for real-world development barriers and protects customers from steep and uncertain cost escalations as California transitions to a clean energy grid. To help mitigate these impacts, the Commission should adopt SCE's flexible compliance proposals as discussed in Section IV.C. For example, SCE estimates the state could save approximately $2 billion in 2035 by adopting an RCPPP GHG target of 30 MMT by 2035, which is still within CARB's electric sector planning target range and consistent with the 90% clean energy target in Public Utilities Code Section 454.53. Furthermore, by creating a first compliance period that covers 2031 to 2035, the Commission allows time for changes in the current political administration that will likely result in a rollback of tariffs and potential reimplementation of tax credits in the future.

Additionally, if Diablo Canyon Nuclear Power Plant's ("DCPP") operations are extended beyond 2029/2030, it could help ease procurement pressure and significantly reduce the cost to customers to allow DCPPP to count toward IRP GHG reduction and/or clean energy requirements. DCPP provides 2.2 GW of zero-carbon baseload capacity. If retained and included in GHG emissions counting, it could offset the need for approximately 7 GW of new solar and 4 GW of storage resources based on SCE's estimates. This substitution alone could yield more than $1.4 billion in system cost savings for year 2035 based on IRP cost assumptions.

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[70] Available at: https://www.edison.com/clean-energy/pathway-2045.

When DCPP is operating and its generation output is not counted toward meeting California GHG and clean energy goals, it essentially means that LSEs have over-procured and the entire generation output of DCPP is assumed to be exported outside-of-CAISO from a clean energy accounting perspective. Such treatment is unreasonable and costly for California customers given the significant generation output from the plant, which is approximately 18,000 GWh annually, and the significant costs that customers are paying for extended operations. Including DCPP in the clean energy framework would provide cost relief, while supporting a more gradual, manageable trajectory toward California's decarbonization goals. Accordingly, the state should consider legislative changes that would allow DCPP to count toward all clean energy and GHG reduction targets in the event that it is still in operation during the effectiveness of the program. The Commission, in a penalty waiver proceeding, should also consider as a major factor in granting such waiver, whether an LSE would have otherwise met its procurement obligations if its share of DCPP were included in its portfolio.

B. Achieving Staff's Indicative 2028 CES Target Would Require an Impossible New Resource Build-Out in an Unrealistic Timeframe

To evaluate the feasibility of achieving the 87% indicative CES target for the 2028-2030 compliance period included in the Staff Proposal,[71] SCE conducted a high-level analysis. This assessment compares the total projected clean energy supply to the CAISO load forecast, which is used as a proxy for statewide assessment. The analysis draws on publicly available data, including information on existing and in-development clean energy projects, as well as the 2024 IEPR load forecast. The results are summarized in Table 4 below.

[71] *See* Staff Proposal at 45.

Table 4: High-Level CES % Gap Analysis for 2028 (CAISO Area)

Clean Energy Supply Category	Assumption/Public Data Source	Estimated GWh Volume in 2028
Biomass	10-year average of 2014-2023 energy generation posted on CEC website (Link)	5,839
Geothermal Existing	Same as above	11,459
Geothermal In-Development	MTR Contracted Capacity (from R2005003-CPUC Resource Tracking Data February 2025 Release) multiplied by Capacity Factor and 8760 hours (Link)	5,851
Large Hydro	10-year average of 2014-2023 energy generation posted on CEC website (Link)	21,347
Small Hydro	Same as above	3,956
Imported Hydro	2022 CSP Tool (CSP_25MMT.xlsb) posted on CPUC website (Link)	11,900
In-State Nuclear/DCPP Extension	10-year average of 2014-2023 energy generation posted on CEC website – include DCPP Extension (Link)	17,494
Out-of-State Nuclear	2022 CSP Tool (CSP_25MMT.xlsb) posted on CPUC website (Link)	5,108
Solar Existing & In-Development	Existing & In-Development Solar Capacity from IRP Input & Assumption Report released in February 2025, multiplied by Capacity Factor and 8760 hours (Link)	65,986
Wind Existing & In-Development	Same as above	18,693
Total – Including DCPP		*167,633*
Total – Excluding DCPP		*150,139*
Load Forecast		
Load Forecast	2024 IEPR Planning Forecast for CAISO Area (Form 1.5a dated April 22, 2025) (Link)	***245,715***
Gap % Estimation		
Estimated CES % Including DCPP		*68%*
Estimated CES % Excluding DCPP		*61%*
Indicative CES % Target for CP6 (2028-2030)		*87%*
Estimated Gap (Including DCPP)		***19%***
Estimated Gap (Excluding DCPP)		***26%***

Based on the analysis, the clean energy share in 2028 is projected to be approximately 61% when excluding generation from DCPP. This falls significantly short of the 87% CES target for 2028-2030, resulting in a 26% gap. To put this into perspective, the shortfall is roughly equivalent to the entire existing fleet of solar resources in the CAISO system. In other words, achieving the 87% CES target starting within the next two to three years would require doubling the current solar generation capacity – an extremely ambitious and likely impossible goal.

Even if DCPP generation is included, the gap remains so large that it would require new procurement equivalent to approximately 70% of the entire fleet of existing and in-development solar resources in the CAISO. This highlights that, even under the most optimistic assumptions, the state would still face a massive build-out requirement in an extremely short and unrealistic timeframe.

Given these findings, along with other considerations outlined in these comments, SCE recommends that the Commission should not make the CES program (or any other RCPPP GHG reduction program) binding starting in 2028. Creating compliance obligations that cannot be met the day they are instituted is patently unfair. Instead, as further discussed in Section IV.C, any RCPPP GHG reduction program should start its first compliance period in 2031, after RPS compliance period 6 (2028-2030) is completed. This timeline would allow for a smoother and more realistic transition to the new clean energy framework, while also providing the necessary time for the Commission and LSEs to address implementation challenges and ensure a successful RCPPP launch.

C. The RCPPP GHG Reduction Program Must Include a Flexible Compliance Framework to Address These Challenges and Customer Affordability

The significant challenges and major cost impacts discussed above demonstrate the necessity of including a robust flexible compliance framework in the RCPPP GHG reduction program. The Commission must establish reasonable clean energy targets and give LSEs flexibility in procuring resources and demonstrating compliance given the current challenges around developing new and diverse clean energy resources and affordability considerations.

The flexible compliance framework should include the following elements. First, SCE recommends the Commission review and potentially update its GHG targets in this 2024-2026 IRP cycle. The Commission should consider adopting two targets: an aspirational planning target and a more modest RCPPP GHG reduction procurement program target that reflects current market realities and better balances affordability concerns. SCE strongly supports

California's ambitious GHG reduction and clean energy goals and supported the 25 MMT by 2035 GHG target adopted for the 2023 PSP. However, given the increases in load from the 2022 IEPR to the 2024 IEPR, the near-term resource development challenges, and the heavy cost burden that customers will face as discussed above, it may be necessary for the Commission to adopt a different trajectory to 2045 goals that recognizes these barriers and is still within CARB's electric sector planning range and the clean energy goals in Public Utilities Code Section 454.53.

Second, the Commission should begin the first compliance period for the RCPPP GHG reduction program in 2031, after RPS compliance period 6 concludes. In addition, each of the compliance periods should be for a period of five years, from 2031 through 2035, 2036 through 2040, and so on, under SCE's preferred simplified mass-based program. Beginning the first compliance period in 2031 is more reasonable under any program that would be adopted by the Commission, since LSEs will still be procuring a significant amount of RPS resources to meet RPS compliance period 6 requirements. This flexibility will provide the time needed for current market constraints to ease and allow time for additional projects to enter the interconnection queue that may provide for procurement of clean firm resources.

Third, if the Commission adopts a CES approach for the RCPPP GHG reduction program, the program should also allow banking of RECs and ZECs across compliance periods, consistent with the RPS program. Banking provides incentives for LSEs to procure early by allowing excess RECs and ZECs to be used in a future compliance period and also provides flexibility to account for unexpected changes in load, clean energy generation, and curtailment, among other factors.

Lastly, the Commission should adopt a penalty waiver process for LSEs who use best efforts to procure resources but could not contract with the resource for reasons outside the LSE's control. In addition, LSEs should be able to seek waivers related to affordability concerns if they see market prices sharply increase. This will likely occur as competition outpaces

demand and LSEs are contracting for the marginal resources to meet their compliance. These cost pressures should not be passed on to customers and must be avoided.

To facilitate the penalty waiver process and make it more efficient, SCE recommends that Energy Division, rather than the Commission's Enforcement Division, review penalty waiver requests given the complexity of the wholesale power markets and Energy Division's familiarity with LSEs' ongoing difficulties in procuring resources

V.

SCE'S RESPONSES TO THE GHG QUESTIONS IN SECTION 5.2 OF THE RCPPP STAFF PROPOSAL

A. 5.2.1 Approaches to GHG Reduction

5.2.1.1. Should existing IRP and RPS processes be used or modified to achieve the electric sector's GHG emissions reduction goals instead of a new CES framework? If so, why?

Yes, as explained in SCE's Alternative Proposal, existing IRP processes could be used and modified to achieve the electric sector's GHG emissions reduction goals through a simplified mass-based GHG reduction program. A mass-based approach offers greater assurance that LSEs are achieving the necessary GHG reductions to meet California's GHG emissions goals. Please refer to SCE's full Alternative Proposal on its mass-based GHG reduction program submitted concurrently with these comments.

5.2.1.2. Should the CPUC adopt the Clean Energy Standard and create Zero-Emission Credit (ZEC) instruments as proposed by Staff with or without modifications?

SCE prefers the adoption of a mass-based GHG reduction program as detailed in its Alternative Proposal. The CES-as-proposed assigns equal value to all clean energy without consideration of whether the clean energy can be used to meet demand and thus reduce usage of emitting resources. SCE's Alternative Proposal demonstrates how adopting the CES-as-

proposed is likely to lead to the development of a clean energy portfolio that is compliant with the CES targets, but fails to meet the state's GHG reduction targets because the clean energy procured under the CES is not being delivered in hours when the system is relying on emitting resources. This could lead to delayed achievement of the GHG reduction goals, the need for one-off procurement orders, and inequitable outcomes as some LSEs may rely on others with more diverse portfolios to reduce system emissions. The most equitable and comprehensive approach to achieving the state's GHG reduction targets is through a mass-based program with forward-looking hourly emissions accounting.

However, if the Commission decides to maintain a CES-like structure for the reasons outlined in the Staff Proposal, SCE proposes the Commission adopt an Enhanced CES program that specifies and regularly updates additional program requirements to supplement the RPS-eligible and zero-carbon resource percentage of annual retail sales requirement. Given the lack of resource diversity currently in the CAISO interconnection queue, it is reasonable to expect that a near-term CES target would primarily be met with new solar resources. Accordingly, SCE proposes that the Commission first implement a prescriptive storage to solar ratio requirement that ensures the system has sufficient storage to shift the contribution of solar energy from standalone solar resources to critical hours when the system is reliant on gas resources to meet demand.

The proposed "storage pairing ratio" requirement is intended to confirm the system has enough storage capacity to shift the contracted solar energy to hours where the system would otherwise be reliant on gas generation resources and allocate responsibility for that storage equitably based on the amount of solar each LSE chooses to include in its portfolio. Specifically, the Commission should use this 2024-2026 IRP cycle to develop a CAISO-queue informed portfolio that satisfies the adopted RCPPP GHG reduction program MMT target. The Commission should then identify the total (including existing) solar capacity and total storage capacity in that portfolio to set the required storage to solar ratio. For example, based on SCE's initial CAISO-queue informed modeling, the portfolio needed to meet a 30 MMT target

would include approximately 40 GW of 4-hour-equivalent storage and 70 GW of solar, which would correspond to a storage to solar ratio of approximately 0.6 MW storage to 1 MW solar, or 2.4 MWh to 1 MW.[72]

As discussed above, the Enhanced CES program would have three-year compliance periods, the same as the RPS program, starting in 2031 after RPS compliance period 6. The Enhanced CES program would require LSEs to demonstrate their contracted portfolios satisfy the required storage pairing ratio in each year of the compliance period in order to count all generated RECs and/or ZECs from standalone solar resources towards their CES targets. The Commission would set the required storage pairing ratio at least two years before each compliance period and also provide indicative ratios for future compliance periods. Failure to satisfy the storage pairing ratio should result in a discount to their generated RECs and/or ZECs from solar resources.[73] The Commission will likely need to use the IRP process to identify other interventions as conditions evolve over time, such as attribute requirements, that are needed to meet emerging system needs and broadly allocate that responsibility to all LSEs.

As explained above, SCE also proposes that LSEs be able to bank their RECs and ZECs across compliance periods, which will help LSEs better manage their portfolios and reduce costs to customers. The banking mechanism has been a critical component of the RPS program, helping to address the inherent lumpiness in load and supply deviations. To ensure alignment between the RPS and CES, the Commission should permit banking of RECs and ZECs across compliance periods under the new CES framework. In fact, the need for banking across compliance periods is even more pronounced under CES than the RPS program for several reasons. First, there is considerable uncertainty in forecasting large hydro resources because their operations are subject to numerous constraints and heavily influenced by long-term climate variability, such as whether future years will be wet or drought-prone. Second, CES targets are

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[72] SCE proposes that all contracted standalone solar, regardless of deliverability status, count towards LSEs' compliance with the Enhanced CES program's storage pairing ratio.

[73] The methodology for the "discount" that would be applied to generated RECs and ZECs should be established in a subsequent workshop upon approval of the Enhanced CES.

expected to be significantly higher than those under the RPS, necessitating greater flexibility in compliance. Restricting banking would make it more difficult for LSEs to meet these higher targets at least-cost. Third, enabling banking would create stronger incentives for early investments in clean energy, supporting a smoother and more cost-effective transition to a decarbonized grid, as it has proven to do under the RPS program for many years.

The Staff Proposal would not allow banking in the CES "to ease administrative assessment of compliance."[74] But the RPS program has allowed banking for many years without issue and there is no evidence it would make assessments of compliance too administratively difficult. It would be more complicated and administratively inefficient to have overlapping RPS and CES requirements where one program allows for banking and one does not.

Finally, as mentioned above, the Enhanced CES program must provide for flexible compliance by not only evaluating the GHG MMT targets in this 2024-2026 IRP cycle and updating the targets, but also allowing penalty waivers if LSEs used best efforts to procure but for reasons outside their control could not, and for affordability concerns.

5.2.1.3. What considerations should be taken into account to ensure that all RECs and ZECs used for CES compliance would align with how CARB regulates GHG emissions in its Mandatory Reporting Regulation (MRR) and GHG Emissions Inventory?

SCE requests clarification from Staff on whether the proposed CES program already incorporates the exemption for emitting resources with annual emissions below 25,000 metric tons of CO_2 equivalent. Under the CARB's Mandatory Reporting Regulation ("MRR"), such resources are not subject to reporting requirements. To ensure alignment with the CARB MRR, SCE recommends that the CES program adjust the emissions target downward by an estimated amount representing the total emissions from these exempt resources. This adjustment should be

[74] Staff Proposal at 48.

made prior to establishing the CES percentage target allocated to LSEs. The estimated emissions from exempt resources can be derived using relevant historical data.

5.2.1.4. Which zero-carbon resources should be eligible for the CES?

Consistent with Public Utilities Code Section 454.53, all RPS-eligible and zero-carbon resources should be eligible to count toward the CES. The RPS statute and the CEC have already established rules on what resources count as eligible renewable energy resources for the RPS program and those resources should continue to count toward the CES. Long lead-time RPS-eligible or zero-carbon resources, such as geothermal and offshore wind procured by DWR as the CPE, should also be eligible.[75]

With respect to zero-carbon resources that are not currently RPS-eligible, SCE recommends the following list of resources be eligible to count toward the CES. The Commission should also consider including other resources that may be identified in party comments.

1. Large hydro.
2. Nuclear.
3. Specified imports from non-emitting sources.
4. Imports from CARB defined Asset Controlling Supplier ("ACS") regions with de minimus emissions, similar to RPS-eligible resources that use a de minimus amount of thermal fuel.[76]
5. Future eligible technologies, including Carbon Capture and Storage, hydrogen, and other potential non-emitting technologies. The Commission should provide

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[75] As commented above, SCE supports subtracting the DWR long-lead time procurement from the need determination to derive the CES targets that apply to all LSEs. If the Commission adopts this approach, then there is no need to further allocate DWR procurement to LSEs.

[76] The CEC's RPS Eligibility Guidebook includes provisions for the use of a de minimus amount of thermal fuel in renewable energy projects to ensure compliance and reliability. *See* CEC, Renewables Portfolio Standard Eligibility Guidebook, Ninth Edition (Revised), January 2017, at Chapter 3.B.2, available at: https://efiling.energy.ca.gov/getdocument.aspx?tn=217317.

additional guidance at the onset of the CES program on how new non-emitting technologies could become CES-eligible resources.

6. The state should also make legislative changes that would allow DCPP to count toward the CES or any other RCPPP GHG reduction program in the event that it is still in operation during the effectiveness of the program.

Imports from CARB-defined ACS regions with de minimus emissions should be eligible to receive ZECs. This is analogous to the long-standing RPS rules under the CEC RPS Eligibility Guidebook that allow renewable resources that use a de minimus amount of thermal fuel to be considered RPS-eligible resources. There should be no difference between the treatment of renewable resources using de minimus amounts of thermal fuel or CARB ACS resources that are tagged with a de minimus amount of emissions.

Indeed, the Commission determined that resources from CARB-approved ACS suppliers are eligible to count as MTR Diablo Canyon replacement bridge resources, just like RPS-eligible resources and resources that have zero on-site GHG emissions.[77] The Commission reasoned that "CARB-approved ACSs typically have a large pool of hydroelectric resources, with much smaller amounts of emitting resources in their portfolios. Under CARB's Mandatory GHG Reporting program, these ACSs are assigned emissions factors for their fleets that are non-zero, but small."[78] Similarly, contracts with CARB-approved ACS suppliers should count toward the CES.

With respect to delivery requirements, any eligible resource that is interconnected or scheduled into the Extended Day-Ahead Market ("EDAM") should be eligible to count toward the CES. Further, there should not be any limits on using unbundled RECs or ZECs or firmed and shaped RECs or ZECs to count toward the CES targets, although statutory limits would remain in place for the RPS. As discussed in Section IV, it will already be very challenging to

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[77] *See* D.24-09-006 at OP 1.
[78] *See id.* at 14.

meet a CES and the Commission should not add additional restrictions that will only make compliance more infeasible and increase costs to customers.

Finally, under the RPS program, there is a category of grandfathered contracts executed prior to June 1, 2010 that count toward the RPS without any delivery requirement or other limits if certain conditions are met.[79] RECs from these contracts are often referred to as "PCC-0" RECs. SCE does not suggest that the Commission establish a new category of grandfathered PCC-0 ZECs for zero-carbon resources. However, PCC-0 RECs that are eligible to count toward RPS requirements should continue to be eligible to count toward the CES without delivery requirements or other limitations.[80] PCC-0 RPS contracts originally executed prior to June 1, 2010 that were RPS-eligible under the rules in place as of the date of contract execution may be amended or modified after June 1, 2010, so long as that amendment or modification does not increase the nameplate capacity or expected quantities of annual generation, or substitute a different renewable energy resource; the duration of the contract may be extended if the original contract had a duration of 15 or more years.[81] These rules for PCC-0 contracts should remain in place in a CES program.

The rationale for allowing PCC-0 RECs many years ago still exists today, which is to provide flexibility and to recognize the investment made by developers to build these renewable resources and honor the renewable energy contracts. These resources played an important role in LSEs meeting their RPS requirements, and with those requirements increasing exponentially in the coming years through the CES, coupled with the difficulty of bringing new resources online, now more than ever is a time to provide the flexibility needed to meet RPS and CES requirements. Therefore, the Commission should acknowledge the commitments made by these resources and allow them to continue operating under extensions of the historical contracts by continuing to allow grandfathering of the PCC-0 RECs in the CES program.

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79 *See* Cal. Pub. Util. Code § 399.16(d).
80 *See id.* §§ 399.16(c), (d).
81 *See id.* § 399.16(d)(3).

5.2.1.5. Are there alternative approaches to GHG reductions that should be considered and why?

SCE proposes adopting a mass-based GHG reduction program as set forth in its concurrently filed Alternative Proposal. A mass-based approach offers greater assurance that LSEs are achieving the necessary GHG reductions to meet California's climate goals. While SCE recognizes the benefits of a CES, including better alignment with the RPS program, an improperly designed CES could lead to resource portfolios with varying levels of GHG reductions. Such portfolios might fail to meet California's GHG targets by inadequately addressing reliance on GHG-emitting system resources. Please refer to SCE's full Alternative Proposal on its mass-bass GHG reduction procurement program submitted concurrently with these comments.

5.2.1.6. Should the CPUC further develop a GHG reduction approach through a certain forum (e.g., workshops)? How could guardrails be implemented so that LSEs continue to procure toward future GHG targets while gathering more stakeholder input on an effective and efficient GHG framework?

SCE recommends the Commission adopt a simplified mass-based GHG reduction program as outlined in SCE's Alternative Proposal. If the Commission adopts a CES, it should be an Enhanced CES as discussed above. Both a mass-based approach or a CES requires further refinement through workshops, though the Commission should issue a decision this year that adopts a GHG reduction program framework and key elements so that LSEs have more certainty on how compliance will be assessed. SCE recommends beginning the RCPPP GHG reduction program's first compliance period in 2031 to provide sufficient time for stakeholder input and program design. Additionally, in the current IRP cycle, SCE recommends that the Commission consider adoption of GHG targets that account for the current challenges in clean energy development. Furthermore, a waiver process should be implemented based on LSE best efforts and/or an affordability metric.

VI.

CONCLUSION

SCE appreciates the opportunity to provide these comments and respectfully requests that the Commission implement the RCPPP consistent with the recommendations set forth herein.

Respectfully submitted,

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Appendix A

Cost Increase Analysis Workpapers

This Appendix is an Excel file and is being served in conjunction with these comments.
The Excel File will also be submitted to the CPUC docket office via mixed media.