BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes. Rulemaking 20-05-003

CALIFORNIA WIND ENERGY ASSOCIATION ALTERNATIVE PROPOSAL FOR THE DESIGN OF THE RELIABLE AND CLEAN POWER PROCUREMENT PROGRAM

Dariush Shirmohammadi Technical Director California Wind Energy Association 1700 Shattuck Ave., #17 Berkeley, CA 94709 Telephone: (310) 733-7752 E-mail: dariush@qualuscorp.com Nancy Rader Executive Director California Wind Energy Association 1700 Shattuck Ave., #17 Berkeley, CA 94709 Telephone: 510-845-5077 x1 E-mail: nrader@calwea.org

On behalf of the California Wind Energy Association

July 15, 2025

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes. Rulemaking 20-05-003

CALIFORNIA WIND ENERGY ASSOCIATION ALTERNATIVE PROPOSAL FOR THE DESIGN OF THE RELIABLE AND CLEAN POWER PROCUREMENT PROGRAM

I. INTRODUCTION

Pursuant to the *Administrative Law Judge's Ruling Seeking Comments on Reliable and Clean Power Procurement Program Staff Proposal* issued by Administrative Law Judge Julie Fitch on April 29, 2025, and Judge Fitch's June 16, 2025, email ruling extending the comment deadlines and allowing separate alternative proposals for the design of the Reliable and Clean Power Procurement Program ("RCPPP"), the California Wind Energy Association ("CalWEA") provides herein an alternative proposal for the RCPPP.

CalWEA continues to support the proposal it made in December 2022.¹ However, this entirely new proposal provides complete flexibility to load-serving entities ("LSEs") regarding the resources they contract with to meet their long-term reliability and greenhouse gas ("GHG") requirements under the RCPPP, while driving towards the Commission's Preferred System Plan ("PSP"). This proposal benefited greatly from the presentations and discussions at the second RCPPP workshop, which the Energy Division convened on June 23-24, 2025.

¹ In its December 12, 2022, Comments on the Ruling Seeking Comments on Staff Paper on Procurement Program and Potential Near-Term Actions to Encourage Additional Procurement, CalWEA proposed that the PSP serve as the basis for a Clean Energy Standard to be applied to individual LSEs, requiring each LSE to deliver its respective share of each resource (or resource type) in the adopted portfolio or, in the alternative, that the Commission adopt a non-storage, evening-peak-delivery attribute requirement.

II. CALWEA'S ALTERNATIVE RCPPP PROPOSAL

A. CalWEA's Proposal Addresses the Shortcomings of the Staff Proposal

CalWEA explained in its separate, concurrent comments why it does not support Energy Division Staff's Clean Energy Standard ("CES") Proposal. CalWEA's alternate proposal addresses the shortcomings in the Staff Proposal. CalWEA's proposal:

- Harmonizes the RCPPP with the Commission's Integrated Resource Planning ("IRP") process and the Preferred System Plan ("PSP") that it produces. In so doing, it will drive toward the PSP's least-cost, resource-diverse, reliable portfolio while providing individual LSEs with compliance flexibility;
- Supports the transmission planning process necessary to achieve the PSP least-cost portfolio, and explicitly accounts for the timing of expected transmission upgrades;
- Supports the development of generation resources that deliver clean energy in the most carbon-heavy hours;
- Includes long-term contracting requirements to meet GHG reduction and Resource Adequacy ("RA") capacity requirements;
- Ensures emissions reductions from gas plants in local reliability areas;
- Aligns with the Commission's 24-hour "slice of day" ("SOD") RA program, thus addressing the state law requirement to allocate integration resource requirements based on causation; and
- Guards against resource shuffling through long-term contracting requirements linked to the PSP, along with additional elements.

All these features will increase the likelihood of achieving the state's GHG-reduction goals most cost-effectively while maintaining system reliability and hedging against various risks.

B. Overview and Key Features

CalWEA proposes an RCPPP framework that:

- Aligns both the RCPPP reliability and GHG frameworks with the RA SOD program, requiring GHG emission reductions across all 288 SOD hours;
- Simplifies GHG compliance using a load-to-emissions system index;

- Links the PSP with the RCPPP through flexible locational contracting requirements, enabling planned resource diversity while not dictating resource mix for individual LSEs;
- Establishes local GHG and criteria pollutant emission reduction goals, if warranted based on more granular CAISO studies, and sets local procurement targets for LSEs with load in Local Resource Areas ("LRAs") while planning transmission to achieve the balance of local emission reductions;
- Includes forward-looking contracting requirements and backward-looking compliance penalties, adjusting GHG penalties to reflect transmission delays and planned transmission; and
- Encourages all PSP-based transmission to be planned for by the start of the RCPPP, with capacity reservations for long-lead-time/location-constrained resources, while allowing for adjustments as necessary based on changed inputs, assumptions, and market response to planned transmission.

The program components are presented in more detail below. CalWEA urges the Commission to adopt this framework and implement a process akin to that established in the RA Program, where the Commission established a process and timeline for developing a final RA restructuring proposal in workshops based on PG&E's SOD proposal.²

C. Reliability Program Component

CalWEA proposes to utilize the SOD RA framework for needs assessment, allocation, and compliance accounting, which aligns with state law.³ Harmonizing the RCPPP with the RA framework will reduce administrative burdens on LSEs and the Commission, promoting efficient achievement of reliability goals.

CalWEA proposes a simple, enforceable, long-term reliability contracting requirement.

² See Commission Decision ("D.") 21-07-014 (July 15, 2021).

³ In its concurrently filed comments on the Staff Proposal at p. 9, CalWEA explained why a 24-hour approach is needed to meet the requirements of AB 1584 (2019), which requires allocating electrical system integration resource procurement needs to each LSE based on the contribution of the LSE's load and resource portfolio to the electrical system conditions that created the need for the procurement and for determining any costs resulting from a failure of a load-serving entity to satisfy its allocated procurement needs.

LSEs would be required to contract resources for the year T+10 to close the gap for the ~12 slices (~12 hours) where the LSE's capacity shortfall (projected LSE hourly MW load plus PRM minus contracted MW supply) is greatest. The remaining ~276 slices need not be contracted long-term; multi-year LSE RA contracting requirements will address these hours. (The long-term RA requirement may be met or mitigated while complying with the long-term GHG contracting requirement as noted below.)

The Commission would establish a multi-year forward RA contracting requirement to be determined. (CalWEA is currently agnostic regarding the number of years ahead and percentage requirements.)

The Commission would also establish penalties for failure to demonstrate required progress toward requirements.

D. GHG Reduction Program Component

1. Framework

CalWEA proposes a 288-hour mass-based requirement, aligned with the same hourly groups as the RA SOD program and the RCPPP SOD reliability requirement. An SOD-based requirement is less complex than an 8,760-hour requirement, yet it addresses all time periods, including carbon-intensive hours. Compliance would be simplified using a system load-to-emissions index, under which LSE compliance would be based on a single annual GHG target, calculated as the sum of GHG-emitting load values in each of the 288 slices.

Compliance would be based on the LSE's total portfolio, including both existing and new resources. This resolves troublesome baseline issues associated with a "new only" approach, such as the inability to provide LSEs with appropriate credit (or obligations) for previous procurements, a new project becoming "existing" when its contract expires in middle of the new project's lifespan, and repowers being treated as "existing" projects despite the required capital investment.

The proposal harmonizes RCPPP procurement with the Commission's IRP program and its PSP. This harmonization will ensure that transmission upgrades planned for the PSP are utilized effectively, rather than allowing them to become stranded assets. Furthermore, it will prevent undermining the procurement necessary to support these transmission upgrades and help achieve the PSP resource mix.

4

The proposal accounts for transmission delays and transmission capacity reserved for long lead-time and location-constrained resources by adjusting backward compliance penalties based on transmission availability. Transmission is the linchpin of clean energy development; therefore, it is necessary to recognize the reality of transmission development timelines.

2. Determination of local needs (GHG and criteria pollutant emission reduction targets)

To ensure that GHG and other pollutants are minimized in LRAs with disadvantaged communities, as required by law (P.U. Code 454.52(a)(1) and 454.57), the RCPPP should explicitly address the issue. The Commission should request that CAISO study and verify its previous assumptions that GHG-emitting generation will be significantly reduced if all existing gas-fired capacity is retained and operated as planned. If CAISO finds otherwise, the Commission should establish local emission reduction targets, set local procurement targets for LSEs (expected to be primarily storage resources) with load in LRAs (and/or the relevant Central Procurement Entity), and plan transmission to achieve the balance of the local emission reduction targets with system resources.

3. Determination of system need (GHG reduction targets) and load-to-emissions index

The foundation of CalWEA's proposal is the determination of total GHG-emitting load (in megawatt-hours, MWh) for each SOD hour, representing the GHG intensity of serving load in each SOD hour. GHG-emitting load would be calculated for the system (and then for each LSE) for a target year by calculating and summing the hourly GHG-emitting load (in MWh) for the 288 SOD hours for that LSE and GHG target year. To determine GHG reduction targets for the LSE, a load-to-emission index (average MMT per MWh of GHG-emitting system load) is calculated at the system level and used to convert the GHG-emitting load to GHG reduction targets for the LSE as described in the following steps:

a) Calculate <u>currently projected system-wide total GHG emissions</u> (MMT) for a future GHG target year using a typical production cost model, such as SERVM, and then determine <u>GHG target emission reductions</u> for that GHG target year. Create a placeholder for expected/estimated DWR-CPE procurements by adjusting the target until procurements are approved and allocated.

b) Calculate <u>currently projected system hourly "GHG-emitting load"</u> (MWh) for each SOD hour for a future GHG target year by projecting the total MWh system load for the SOD hour less total MWh from GHG-free resources contracted by all LSEs for that SOD hour. The projected load for each SOD hour of a month is comprised of the total MWh in all similar SOD hours for that month.⁴

If the total MWh of GHG-emitting load for an SOD hour is negative, it would be counted as zero. (LSEs can, however, use the additional MWh from GHG-free resources for their contracted storage resources as explained in 3a below.)

In calculating the system-hourly GHG-emitting load, include contracted resources that require new transmission based on the most recent PSP, whether or not that transmission is yet included in the CAISO transmission plan and may be subject to transmission delays.

- c) Calculate <u>total annual GHG-emitting system load (MWh)</u> for each future GHG target year, by adding up GHG-emitting load (MWh) for all 288 SOD hours.
- d) Create a <u>load-to-emissions index</u> (MMT/MWh) for GHG-emitting system load. For each GHG target year, divide the system total MMT (from Step a) for that year by the system total MWh of GHG-emitting load (from Step c) for the same year to determine the average MMT per MWh of GHG-emitting system load.
- e) Calculate total annual system GHG emission-reduction targets.

4. Allocate system need to LSEs (LSE GHG-reduction requirements)

- a) Calculate the <u>currently projected</u> GHG-emitting load (MWh) for each LSE for each SOD hour in each target year by repeating Step 3b above.
 - In calculating the hourly GHG emitting load for an LSE, include contracted resources that require new transmission based on the most recent PSP, whether or not that transmission is yet included in the CAISO transmission plan and may be subject to transmission delays.
 - Treatment of storage in hybrid and co-located projects. LSEs may utilize the energy capacity of their storage projects to distribute their GHG-free energy to their desired hours, provided that GHG-free

⁴ For example, to calculate the MWh load for SOD hour 68 (hour 20 of the month of March), the MWh loads for 31 hour-20s need to be added together.

energy is not double-counted (following the same concept as for RA SOD).

- b) Produce <u>total annual GHG emissions for each LSE</u> for a target GHG year by adding up the hourly GHG-emitting loads for that LSE (calculated in Step 4a) for all 288 SOD hours of the target year. Each LSE will have a single annual total of X GWh of GHG-emitting load for the target GHG year.
- c) Use the index calculated in Step 3d to convert the annual GHG emitting MWh load value to a GHG MMT value for each LSE.
- d) Establish annual GHG reduction targets for each LSE through pro-rata allocation of the total annual system-GHG reduction target (from Step 3e) among LSEs using each LSE's annual GHG-emitting load. LSEs will procure GHG-free resources to meet their GHG-reduction targets.
 - While compliance would be based on a single annual number, LSEs will need to look for GHG-free resources that address the biggest gaps in the 288 hours, since adding GHG-free resources that produce in saturated hours would provide no benefit. In selecting GHG-free resources, LSEs will also seek to meet their long-term RA requirements. LSEs in LRAs will strive to meet their requirement for planned resources inside and, in the longer term, outside the LRA.

5. Forward and Backward Compliance

- a. Compliance Plans / Forward Requirement:
 - i. Timing:
 - Three-year Compliance Plans dovetailing with RPS compliance periods, beginning as soon as possible, ideally 2027-2029.
 - Compliance is satisfied by showing average emissions over the compliance period at or below the average target.
 - LSEs should begin reporting progress towards targets as soon as their allocated share is known.
 - ii. 100% GHG forward requirement for T+1 through T+5. Compare the contracted portfolio against each LSE's GHG reduction target. Contracted resources must align locationally and temporally⁵ with resources in the most recent PSP and the CAISO TPP.
 - The Commission should strive to plan all PSP-based transmission by the start of the RCPPP, e.g., 2028, with capacity reservations for LLT/location-constrained resources. Adjustments may be made going forward as necessary based

⁵ Contracts must reflect transmission in-service date or beyond.

on changed inputs, assumptions, and market response to planned transmission.

- Long-term contracting, including RECs and GHG attributes, must cover at least 65% of total resources for the allocated need for T+5. A long-term contracting requirement is a key feature of the Renewables Portfolio Standard and the Mid-Term Reliability orders that have successfully driven new development
- b. Compliance / Backward Requirement
 - i. For T-1 procurement verification, use the LSE's actual online portfolio to calculate compliance with its annual, and any local, GHG reduction targets. Penalties adjusted based on transmission availability, per below.

Compliance should be based on what was planned for, not what actually occurred in the operational year, T-0.

6. Penalties for Forward & Backward Requirements

- a. T+5 Forward Requirement
 - i. Penalize deficiencies at \$50/MWh or higher for T+1 through T+5 noncompliance.
 - ii. Exception: LSEs get full penalty waivers for contracts with resources whose Generation Interconnection Agreement (GIA) CODs are dependent on the in-service dates of planned transmission.
- b. Annual Backward Compliance
 - i. Penalize deficiencies at \$50/MWh or higher based on planned load and GHG resources for T-1 (rather than actual values).
 - ii. Full penalties for GHG-emitting load over LSE emission-reduction target.
 - iii. Exception: The excess attributed to delayed transmission is penalized at 5% of full penalty. This leaves some incentive for LSEs to find resources while waiting for transmission.
- c. In the near term, evaluate the MMT system and LSE targets following the upcoming IRP cycle and establish soft pre-RCPPP targets.

7. Resource Shuffling and Zero-Carbon Resources

This proposal guards against resource shuffling by requiring long-term contracts, where contracts are matched with resources in the latest PSP and CAISO TPP, both in location and time. Additional elements may be necessary as well, including adjusting or removing in-state large hydro and nuclear power from the baseline, and prohibiting out-of-state large hydro and nuclear power from the tree-carbon resources" should be defined in an SB 100 interagency process and included in future PSPs as the Commission and LSEs plan for them. Unbundled RECs and ZECs should not be allowed to offset GHGs.

III. CONCLUSION

CalWEA's proposal addresses all the problems identified in the Staff Proposal discussed in CalWEA's concurrently filed comments, thereby increasing the likelihood of achieving the state's GHG-reduction goals most cost-effectively while maintaining system reliability.

CalWEA urges the Commission to adopt CalWEA's RCPPP framework and implement a process similar to that established in the RA Program for the Slice of Day framework so that parties can work together to flesh out the details of this RCPPP program.

Respectfully submitted,

/s/ Nancy Rader Nancy Rader Executive Director California Wind Energy Association 1700 Shattuck Ave., #17 Berkeley CA 94709 Telephone: (510) 845-5077 x1 Email: nrader@calwea.org

On behalf of the California Wind Energy Association

July 15, 2025