

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Develop an
Electricity Integrated Resource Planning
Framework and to Coordinate and Refine Long-
Term Procurement Planning Requirements.

Rulemaking 16-02-007
(Filed February 11, 2016)

**COMMENTS OF
VOTE SOLAR AND THE SOLAR ENERGY INDUSTRIES ASSOCIATION
ON THE PROPOSED DECISION REQUIRING ELECTRIC SYSTEM
RELIABILITY PROCUREMENT FOR 2021-2023**

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Vote Solar and the Solar Energy Industries Association (“SEIA”) appreciate the opportunity to offer comments on the Proposed Decision (“PD”) released September 12, 2019 requiring electricity system reliability procurement for 2021-2023. These opening comments are submitted in accordance with Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”).

I. INTRODUCTION

The overarching purpose of the Integrated Resource Planning (“IRP”) framework put in place by Rulemaking 16-02-007 is to set the electricity sector on a path to reduce greenhouse gas (“GHG”) emissions consistent with the goals articulated in Senate Bill 350 (DeLeon, 2015), SB 100 (DeLeon, 2018) and Commission Decision D. 18-02-018. In several regards, the PD falls short in advancing the purpose of this rulemaking. Unless the PD is amended, this decision may raise questions about whether California is on the correct path to reducing GHG emissions, integrating more renewable energy resources to the grid, and achieving the timely retirement of fossil-fired power plants located along California’s coast whose air emissions harm public health and that pollute the marine environment through once-through cooling.

The Commission should amend the PD to do the following: 1) Acknowledge clearly that the ongoing operation of once-through-cooling (“OTC”) power operation needs to be curtailed and terminated as quickly as possible; 2) Adopt a “least regrets” strategy for procuring system reliability that focuses on procurement of new renewable and storage capacity to meet reliability needs and advance GHG reduction goals; and 3) Assure that a methodology is in place for determining the qualified capacity for hybrid renewable resources using dispatchable energy storage located either in front of or behind the utility meter, so that these clean capacity resources are able to compete in the proposed reliability procurement.

II. CONTINUED OPERATION OF ONCE-THROUGH-COOLING POWER PLANTS SHOULD BE MINIMIZED OR AVOIDED ALTOGETHER

OTC power plants in Los Angeles, Orange and Ventura Counties totaling 3,750 MW of system capacity are currently scheduled to retire by December 31, 2020. The impending closure date has been known since October 2010, when the State Water Resources Control Board adopted a schedule for the closure of OTC units up and down the California coast. In this proceeding, several parties have specifically recommended that the Ormond Beach Power Plant in Ventura County has a notable impact on disadvantaged communities that are already burdened with pollution and should not be allowed to continue operation. Vote Solar and SEIA agree with this assessment which further supports minimizing the operation of other OTC units after 2020.¹

While the PD states that the Commission is committed to OTC policy compliance as soon as possible,² the PD is written in a manner that suggests the possibility of continued operation of

¹ Moreover, while the PD notes (at 20) that the capacity factors of the OTC power plants have been under 10 percent in recent years, it continues, without any environmental analysis, to assert that “continuing to operate the plants at this level will be “minimizing the marine environment impact of these facilities.” This is an unsupported finding of fact and needs to be modified to reflect the serious impacts on air quality in disadvantaged communities and the marine environment from the continued multi-year operation of these facilities.

² PD at 18.

the OTC units indefinitely into the future.³ The PD should be amended to provide more clarity regarding the closure of the OTC power plants rather than proposing a policy that leaves open the possibility of further extensions of the operation of these aging, polluting power plants.

First, there are multiple references in the PD to operating the OTC power plants for “up to three years” to allow time for additional procurement of new resources to take place.⁴ However, in Conclusion of Law No. 4, the PD concludes that the Commission should authorize the continued operation of “up to 3,750 MW of capacity for at least three years.”⁵ This open-ended commitment to the possible operation of the OTC units is not supported in the record, nor is it consistent with state policy to reduce greenhouse gas emissions and minimize the impacts of power plant operation on disadvantaged communities and the marine environment.⁶ At minimum, the PD should be modified to eliminate any possible interpretation of the Decision as an open-ended commitment to the possible operation of OTC units.

Second, while the PD suggests that potentially 3,750 MW of OTC capacity may be needed for reliability purposes, the PD nor the record in this proceeding provide rigorous analytical support for assuming that this amount of capacity will be needed in 2021. Nowhere in the PD is there justification for continuing to operate 3,750 MW of OTC units.⁷ If the

³ Conclusions of Law No. 4 states the Commission will recommend extension of compliance deadlines for “at least 2,500 MW and up to 3,750 MW for *at least* three years.”

⁴ PD at 2 and 20, and Ordering Paragraph 1.

⁵ PD at 51 (emphasis added).

⁶ A recent decision (ER 19-1641-001) by the Federal Energy Regulatory Commission broadly expands the CAISO’s authority to designate fossil generation in California as Reliability Must Run units and circumvent Commission-approved policies designed to reduce greenhouse gas emissions and public health impacts on disadvantaged communities. This decision increases the importance of limiting waivers on OTC power plants to only what is needed for system reliability in 2021.

⁷ SCE’s opening comments on the staff proposal argued for a need as high as 5,500 MW, but SCE’s analysis contained several errors and was clearly overstated, as SEIA explained in detail in its reply comments. The PD correctly does not adopt the inflated need that SCE recommended.

Commission believes that this quantity of reliability resources is needed, then it should have also authorized procurement of incremental clean energy resources up to this amount. However, the PD only authorizes 2,500 MW of system reliability procurement with the expectation that 60% or 1,500 MW will be on-line by the summer of 2021. Vote Solar and SEIA submit that it is only the 2021 need for 1,500 MW that is so near in time that existing OTC capacity may be needed to provide it. Thus, the only demonstrated need to extend the retirement date of OTC capacity is to the end of 2021 (i.e. by one year) for no more than 1,500 MW of OTC units. Vote Solar and SEIA note the CAISO's recommendation that the first units to be considered for a one-year extension should be Alamitos Units 3 (320 MW), 4 (320 MW) and 5 (480 MW), with a combined capacity of 1,120 MW.⁸ The PD should be modified to approve only a 1 year extension for the retirement of the OTC facilities with capacity of no more than 1500 MW, Moreover, the Commission should make clear its expectation that the 1,000 MW of system reliability procurement which the PD proposes to come on-line in 2022 and 2023 will be clean, GHG-free capacity resources.

III. A “LEAST REGRETS” SYSTEM RELIABILITY STRATEGY SHOULD PRIORITIZE PROCUREMENT OF NEW ZERO-CARBON RESOURCES UNDER LONG-TERM CONTRACTS

The PD recommends that the Commission adopt what it calls a “least regrets” solution to meet the need for additional system reliability procurement. The PD notes that the Commission has the responsibility to ensure that customers have safe and reliable electric service that requires a balancing act of reasonableness. The order states that too few system resources could lead to shortages or and/or market manipulation while too much system capacity could unnecessarily

⁸ CAISO Opening Comments on the Staff Proposal, at 7-8.

increase ratepayer costs as well.⁹ At the same time, the Commission has an obligation to make progress on achieving the climate and renewable integration goals specified by statute.

Thus, the Commission's responsibility is to achieve an appropriate balance of costs, benefits and risks as it assures reliability of electric service and decarbonization of the electric system. Vote Solar and SEIA believe that the PD errs on the side of maintaining excessive reliance on the OTC fossil power plants through the period of 2021-2023 and possibly further into the future.

The combination of procuring at least 2,500 MW of incremental system reliability resources and the backstop extension of no more than 1,500 MW of OTC capacity through 2021 should reasonably reduce the likelihood of system emergencies in 2021 and beyond. In addition, there is adequate time before the summer of 2021 to further clarify the contractual obligations of providers of imported capacity. We agree with the concern expressed in the PD about the possibility of resource shuffling by contracting for out-of-state hydroelectric capacity. However, this concern about GHG emissions is a separate issue from the issue of assuring that there are sufficient system reliability resources available in 2021.

The PD proposes that 2,500 MW of incremental system reliability resources be procured with at least 60 percent delivered by August 2021, 80 percent by August 2022 and 100 percent by August 2023. Vote Solar and SEIA support this schedule. We believe that there are sufficient zero-carbon system reliability resources available in the CAISO queue to support these procurement targets and there should be no need to authorize procurement of capacity from existing fossil fuel power plants. The extension of 1,500 MW of OTC capacity through 2021 will ensure that there is adequate capacity for the summer of 2021 if the longer-term procurement of clean resources cannot occur by then.

⁹ PD at 14.

The CAISO has recently launched a new stakeholder initiative intended to develop market participation rules for hybrid resources. The CAISO issue paper highlights that 41% of the capacity currently in the CAISO interconnection queue is comprised of hybrid resources, with 35,341 megawatts (“MW”) of hybrid resources out of a total of 85,643 MW of generating projects in the queue. This suggests that there is a significant opportunity for the development of such hybrid resources to meet near-term system reliability needs.¹⁰

Given the ample amount of zero-emission hybrid resources in the queue together with the opportunity the utilities have to develop stand-alone energy storage projects and to contract for incremental demand-side resources, Vote Solar believes the Commission has not justified the decision to authorize the procurement of capacity from existing fossil fuel power plants, particularly less efficient OTC units. Instead, the Commission should amend the PD to require Southern California Edison to procure only zero-carbon system reliability resources unless those resources cannot be brought online by August 1, 2021.

IV. HYBRID RESOURCES REQUIRE A CLEAR METHODOLOGY FOR DETERMINING QUALIFYING CAPACITY IN ORDER TO PARTICIPATE IN THE SYSTEM RELIABILITY PROCUREMENT

The PD observed that the Commission anticipates that “hybrid generation and storage projects will fare well in competitive solicitations for system reliability resources and should be strongly considered.”¹¹ Vote Solar and SEIA agree with this aspiration; we believe it is reasonable to assume that a significant amount of the hybrid capacity being studied in the CAISO queue could be available to respond with competitive offers to the SCE solicitation proposed in the PD as well as any other solicitations issued by other Load Serving Entities

¹⁰ Hybrid Resources Issue Paper, CAISO (July 18, 2019), at 3-4.

¹¹ PD at 38.

(“LSEs”) to achieve the 2,500 MW of incremental system reliability resources.¹²

However, there currently is an important policy gap regarding the methodology for assigning capacity value for hybrid generation and storage projects. Vote Solar has joined with other parties in submitting a Joint Motion in this proceeding requesting a schedule and process for determining the qualifying capacity (“QC”) value of hybrid resources.¹³ SEIA strongly supports the Joint Motion. That motion notes that the Commission has not yet developed methodologies for determining a combined QC value for a dispatchable battery combined with a dispatchable generation resource, or a dispatchable battery combined with a renewable resource. Furthermore, the Commission has not set a clear timeline for establishing a QC methodology for hybrid generation resources.

Vote Solar and SEIA urgently ask the Commission, as part of this proceeding, to expeditiously adopt an interim methodology for determining the QC value for hybrid resources, both for those located in front of the meter and as well as those located behind the meter. The Joint Motion proposes that the Commission adopt on an interim basis SCE’s proposal in R.17-09-020 for determining the QC value for hybrid resources, a proposal that was widely supported in that docket. Failure to adopt an interim QC value for hybrid resources will severely limit the opportunity for these resources to participate in SCE’s solicitation to procure system reliability capacity, as well as in solicitations by other southern California LSEs with new system reliability obligations under the PD.

¹² SEIA’s Opening Comments on the Staff Proposal, at 12, discussed the very attractive offers that other utilities have received recently for new hybrid solar plus storage resources (including for projects located in California) to come on-line in the 2021-2023 time frame.

¹³ Joint Motion of Engie Storage, Enel X, Tesla, Inc., Sunrun Inc., Center for Energy Efficiency and Renewable Technologies, California Energy Storage Alliance, and Vote Solar to establish a schedule and process for determining the capacity value of hybrid resources, filed in this docket on September 27, 2019 (“Joint Motion”).

IV. RECOMMENDED CHANGES TO FINDINGS OF FACT, CONCLUSIONS OF LAW AND COMMISSION ORDER

Vote Solar and SEIA recommend that the following changes be made to the Findings of Fact, Conclusions of Law, and the Commission Order:

Proposed Changes to Findings of Fact

12. The capacity factors of the OTC units with current retirement dates of December 31, 2020 are all under 10 percent for the past several years, which means that the use of sea water for cooling is ~~minimal~~ declining compared to their historic usage but is not an insignificant impact on the marine environment.

16. ~~In addition to~~ To minimize the continued extension of 1,500 MW to 3,750 MW of OTC capacity through beyond 2021, another at least 2,500 MW of incremental zero-carbon system resource adequacy and renewable integration resources will be needed by Summer 2023, as a “least regrets” amount necessary to ensure system reliability.

17. The immediate need for system resource adequacy and renewable integration resources begins in 2021 and will extend through ~~at least 2023~~ and beyond as more renewable resources are added to meet California’s climate goals.

Proposed Changes to Conclusions of Law

3. The Commission is committed to the timely retirement of OTC units to comply with Water Board regulations, but also has a responsibility to ensure safe and reliable electric service and to reduce greenhouse gas emissions.

4. The Commission should recommend to the SACCWIS and the Water Board that OTC compliance deadline extensions be granted for ~~at least~~ no more than 1,500 MW and up to 3,750 MW of capacity through 2021 ~~for at least up to three years~~, as a bridge strategy to allow new zero-carbon capacity to come online.

5. The Commission should address the need for system peak capacity given the shift of the peak to later in the day and later in the year, which increases the value of hybrid solar plus storage resources ~~makes the contribution of solar resources less valuable~~ and makes the need for other zero-carbon renewable integration resources more acute.

7. It is reasonable for the Commission to require 2,500 MW of incremental zero-carbon system resource adequacy resources to be procured, with at least 60 percent online by August 1, 2021, 80 percent by August 1, 2022, and 100 percent by August 1, 2023.

15. The Commission should prioritize not distinguish, in its incremental procurement requirement identified herein, ~~between existing and new~~ zero-carbon capacity resources.

20. The Commission should assure that the rules for determining the qualified capacity ~~not set a specific capacity target~~ for hybrid resources, ~~but should~~ allow them to count toward the procurement requirements in this decision.

Proposed Changes to Ordering Paragraphs

1. The Commission recommends that the State Water Resources Control Board extend the once-thru-cooling compliance deadlines for one year (2021) up to three years for no more than ~~of~~ at least ~~12,500~~ 1500 megawatts (MW) and ~~up to 3,750 MW~~ of capacity, of units with current compliance deadlines of December 31, 2020, in order to allow time for new clean electricity capacity to come online.

6. Southern California Edison Company (SCE) shall conduct an all-source solicitation to procure zero-carbon system reliability resources for its obligation given in Ordering Paragraph 2a above and shall prioritize ~~consider existing as well as~~ new resources, demand-side resources, ~~combined heat and power,~~ and storage, ~~as long as all~~ and consider existing resources as long as ~~they~~ are shown to be incremental to the baseline identified in Ordering Paragraph 5 above. SCE shall utilize the Demand Response Auction Mechanism contract as a starting point for negotiations with any demand response resources that bid into its solicitation.

IV. CONCLUSION

Vote Solar and SEIA thank the Commission for its work to address issues related to electric system reliability procurement for 2021-2023 and appreciate the opportunity to provide these opening comments on the PD.

Respectfully submitted this 2nd day of October, 2019, at San Francisco,
California.

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¹⁴ Pursuant to Rule 1.8(d), SEIA's representative is authorized to sign these comments on behalf of Vote Solar.