

BEFORE THE PUBLIC UTILITY COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue
Electric Integrated Resource Planning and
Related Procurement Processes

Rulemaking 20-05-003

**OFFSHORE WIND CALIFORNIA COMMENTS ON THE
ADMINISTRATIVE LAW JUDGE’S AUGUST 18, 2021 RULING
SEEKING COMMENTS ON THE PREFERRED SYSTEM PLAN
September 27, 2021**

In accordance with Rule 14.3 of the California Public Utilities Commission’s (Commission’s) Rules of Practice and Procedure, Offshore Wind California (OWC) submits the following comments in response to the Administrative Law Judge’s August 18, 2021 ruling (the Ruling) summarizing analysis conducted by Commission staff relating to key elements of a Preferred System Plan (PSP) for the current integrated resource planning (IRP) process and requesting comments on the staff analysis. OWC filed a motion for party status on September 24, 2021.

I. INTRODUCTION

The past year has been an eventful one for California offshore wind energy. Among other significant events:

- In November 2020, the National Renewable Energy Laboratory (NREL) published a study of floating offshore wind energy in California that reviewed advances in offshore wind technology and projected continuing declines in costs through 2030.¹
- In December 2020, Congress passed and President Trump signed the Consolidated Appropriations Act of 2021.² Section 204 of the Act established a 30% investment tax credit (ITC) for offshore wind. This provision, as interpreted by the IRS, substantially

¹ P. Beiter, W. Musial, et al., NREL, The Cost of Floating Offshore Wind Energy in California Between 2019 and 2032 (Nov. 2020), available at <https://www.nrel.gov/docs/fy21osti/77384.pdf>.

² Consolidated Appropriations Act, 2021, Pub. L. No.116-260, available at <https://www.congress.gov/bill/116th-congress/house-bill/133/text/enr>.

reduces the cost of capital for offshore wind projects that commit 5% of eligible CAPEX by the end of 2025 and complete the project within ten years of commencement.

- In February 2021, the Commission provided inputs to the CAISO 2021-2022 Transmission Planning Process (TPP) that included an offshore wind sensitivity portfolio with 8.3 gigawatts (GW) of offshore wind capacity in 2030.³
- In March, California energy agencies issued their first SB 100 report to the legislature, which showed that California would need at least 10 GW of offshore wind capacity to cost-effectively meet its 100% clean energy goals by 2045.⁴
- In May, Governor Newsom and senior energy, climate, and military officials in the Biden Administration announced an agreement on offshore wind leasing to open federal waters off Morro Bay and continue progress toward leasing off Humboldt Bay.⁵
- Earlier this month, the California legislature passed, and Governor Newsom signed AB 525,⁶ which directs the California Energy Commission (CEC) to establish offshore wind targets for 2030 and 2045, requires the CEC and other agencies to develop a permitting roadmap that involves all affected stakeholders, and works to strengthen marine and coastal protection and address other environmental concerns.

These developments reflect a growing realization that offshore wind power can play an important role in California’s transition to a carbon-free electricity system. We appreciate the Commission’s work with the State’s “Offshore Wind Task Force to coordinate and facilitate actions related to the development of offshore wind” (Ruling at 46), and its willingness, evident from prior work of the Commission staff and significant portions of the Ruling, to consider

³ D.21-02-008 (Feb. 11, 2021) (this docket), available at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M366/K426/366426300.PDF>.

⁴ SB 100 Joint Agency Policy Report to the Legislature (March 15, 2021) (CEC Docket 19-SB-100) (hereafter “SB 100 Report”), available at <https://www.energy.ca.gov/publications/2021/2021-sb-100-joint-agency-report-achieving-100-percent-clean-electricity>.

⁵ The White House, Fact Sheet: Biden Administration Opens Pacific Coast to New Jobs and Clean Energy Production with Offshore Wind Development (May 25, 2021), available at <https://www.whitehouse.gov/briefing-room/statements-releases/2021/05/25/fact-sheet-biden-administration-opens-pacific-coast-to-new-jobs-and-clean-energy-production-with-offshore-wind-development/>.

⁶ AB 525, available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB525.

innovative approaches to procurement and transmission challenges that offshore wind faces as an emerging renewable energy resource that requires large-scale projects with long development timelines.

II. RESPONSES TO SELECTED QUESTIONS SET OUT IN SECTION 15 OF THE RULING

OWC has prepared responses to five of the questions set out in section 15 of the Ruling.

Question 2. Comment on the reliability analysis of the aggregated 38 MMT LSE plans.

OWC is examining whether the Commission's modeling assigns appropriate weight to the reliability benefits of offshore wind. Those benefits include diversification of the State's energy supply and reduction of fire risk where, as in the case of proposed offshore wind development off the Central Coast, offshore wind relies on subsea transmission and underground connections to the existing grid, rather than on new overhead lines.⁷ We expect to complete that analysis soon and may address this topic in reply comments.

Question 3. Comment on the appropriateness of the scenarios and sensitivities developed in RESOLVE to be considered as the preferred portfolio. Suggest any alternative sensitivities or changes to the analysis.

OWC urges the Commission to monitor the progress of renewable energy tax provisions in pending federal reconciliation legislation and consider creating a sensitivity case reflecting the effects of significant changes in federal tax treatment. Tax policy changes of the magnitude under consideration now can dramatically affect the cost of renewable power and those effects can differ substantially across renewable resources. A sensitivity case to address the effects of tax policy changes, whether those changes are enacted before the Commission finalizes the 2022-2023 TPP package or merely advances to the point where they show a substantial prospect of enactment by that time, could add substantial value to the TPP exercise.

⁷ The reliability benefits of resource diversification have been recognized by the Commission (e.g., Administrative Law Judge's Ruling Seeking Comments on Portfolios to Be Used in the 2021-2022 Transmission Planning Process Attach. B at B-8, B-10 (Oct. 20, 2020) (Docket 20-05-003)), the CAISO (e.g., CAISO Comments in Response to October 9, 2020 Email Ruling at 6 (Oct. 23, 2020) (this docket), and the SB 100 joint agency group (SB 100 Report at 75-76 (March 15, 2021)).

The Commission has recognized that accurate modeling of electricity costs requires up-to-date treatment of relevant federal tax provisions. One of the changes made to the RESOLVE model for use in the current round IRP proceeding was an update of federal production tax credit (PTC) and investment tax credit (ITC) schedules to reflect the law and Internal Revenue Service guidance as of December 2020. (Ruling at 13.) This update to the RESOLVE model was evidently a key reason why projected 2032 offshore wind deployment increased from 0 in the core scenario evaluated in the SB 100 Report to 1,708 MW in the core case set out in the current Ruling (Ruling at 16). A March 2021 industry analysis of the current 30% investment tax credit (ITC) for offshore wind (enacted in December 2020) found that the ITC could reduce the Levelized Cost of Energy (LCOE) for 3 to 4 GW of offshore wind off the central coast of California by 15 to 20% if federal and state agencies acted quickly enough to allow those projects to meet IRS-administered deadlines (including, most notably, a requirement that projects commit 5% of eligible project costs by the end of 2025). Savings to California ratepayers if these projects were able to qualify for the ITC were estimated at \$3.6 to \$7.8 billion over the life of the studied projects.⁸

Enactment of pending proposals for tax policy changes designed to encourage renewable energy development could have an even larger effect on renewable energy costs. For example, the Biden Administration supports extending the deadline for commencing construction on qualifying facilities (including offshore wind farms) to the end of 2026 for full ITC eligibility, followed by a phase-down to complete elimination over five years. The Biden Administration also supports an option to elect a cash payment rather than a business tax credit. This “direct pay” credit would eliminate the need for participation by “tax equity” investors and further reduce the LCOE of power from eligible projects.⁹ Given the potential significance of current deliberations concerning support for renewable energy development in the federal tax code, a collection of TPP scenarios and sensitivities that omits up-to-date information on federal tax

⁸ OWC, American Clean Power-California, and Member Companies, Offshore Wind Industry Responses to Questions from Staff of the California Public Utilities Commission (March 2021), available at <https://static1.squarespace.com/static/5d87dc688ef6cb38a6767f97/t/60ac16f66758be3683a03e75/1621890812295/CPUC+Responses+Final+%28Mar-15-2021.2%29.pdf>.

⁹ U.S. Department of the Treasury, General Explanations of the Administration’s Fiscal Year 2022 Revenue Proposals At 38-39 (May 2021), available at <https://home.treasury.gov/system/files/131/General-Explanations-FY2022.pdf>.

treatment would fail to provide useful guidance on renewable resource costs and resulting transmission priorities.

We appreciate that the desire to provide up-to-date scenarios and sensitivity cases has to be tempered by the need for timely initiation of the CAISO 2022-2023 TPP effort. We suggest that the Commission staff monitor the progress of proposed legislation affecting federal tax treatment of renewable energy projects to determine, at the point when the list of scenarios and sensitivities has to be finalized, whether relevant tax changes are likely enough and clear enough to warrant addition of a changed tax policy sensitivity case to the list of TPP scenarios.

Question 14. If you believe the Commission should take more of a programmatic approach to GHG-beneficial procurement, explain the process you recommend and your rationale.

Section 7.2 of the Ruling observes, correctly in our view, that “clear guidance” produced by the planning track of the IRP process “may not be sufficient to ensure optimal procurement outcomes” for some types of system assets. The Ruling cites, as an example, a lack of effective incentives for LSEs to invest in storage in circumstances where the IRP analysis indicates that storage investment is an efficient substitute for transmission investment. OWC believes that offshore wind power represents another potential system asset that the existing IRP process is unlikely to cause LSEs to procure at optimal levels.

The Commission staff’s proposed Procurement Framework discusses several features of resources that the usual IRP procurement process – LSE procurement activities guided by Reference System Plans and Preferred System Plans – is unlikely to deploy at optimal levels.¹⁰ Floating offshore wind exhibits three such features. In particular, floating offshore wind is an emerging technology that requires both long lead times to deploy and large-scale installations to perform efficiently.

- Floating offshore wind is an emerging technology. First-generation projects will cost more than their successors. In fact, first-generation projects will help drive down costs of later projects by contributing to advances in technology and know-how, gains in understanding that reduce the costs and risks of permitting and environmental review, supply chain development, and improvements in infrastructure used for construction,

¹⁰ Staff Proposal for Resource Procurement Framework in Integrated Resource Planning at A-35 to A-36 (Nov. 18, 2020) (this docket), available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M351/K577/351577337.PDF>.

installation, and maintenance. Even if offshore wind is an important component of the optimal system in the long run, LSEs will not be eager to subsidize others by purchasing power from early, higher cost floating offshore wind projects. Eliminating the penalty for early procurers can accelerate offshore wind development and unlock system-wide benefits.

- Floating offshore wind is a long lead-time (LLT) resource. A long lead time between the commitment to purchase power, needed to finance project construction, and the commencement of operations tends to be unattractive to individual LSEs (particularly smaller ones). Large commitments to future purchases of LLT resources can raise significant risks for LSEs that must have access to backup resources. Floating offshore wind exhibits strong economies of scale. In the North Sea, the region with the longest history of offshore wind development, project scale has risen steadily over time. Early projects, completed before 2010, rarely exceeded 200 MW. Projects currently in the development pipeline, which will produce power at a far lower unit cost, are typically at the gigawatt scale. To realize the benefits of these economies of scale, California will need a procurement process that allows a single large offshore wind installation to serve the loads of many LSEs without complex multi-party contracting that drives up costs and risks.

OWC believes that further analysis of offshore wind's system-wide value and fit with the ordinary IRP procurement process will confirm that a programmatic approach to procurement of offshore wind is appropriate. This procurement should be designed to avoid disadvantaging any class of LSEs in relation to others. OWC expects to develop additional, more specific recommendations, as the Commission completes its work to recognize offshore wind as a default candidate resource (Ruling at 45) and incorporates results of the CAISO's offshore wind study into the RESOLVE and SERVVM models.

Question 21. Comment on whether and how the Commission should act to preserve transmission deliverability rights in the central coast area that could be utilized for offshore wind or other resources.

OWC believes that the Commission should act to preserve transmission deliverability rights in the Central Coast area to ensure that power from LLT offshore wind projects at the Morro Bay Call Area can access the transmission resources at Diablo Canyon and, possibly,

Morro Bay. Transmission capacity freed by the retirement of the Morro Bay gas plant and planned retirement of the nuclear generating units at Diablo Canyon was a critical factor in the deliberations of the federal-state task force on California offshore wind siting (active since 2016), which led to the federal Bureau of Ocean Energy Management's (BOEM's) designation of the Morro Bay Call Area. A federal auction for leases in this area is expected early fall of 2022.

Failure to reserve these deliverability rights for offshore wind development could undermine the State's opportunity to launch an offshore wind industry in a time frame that allows California rate payers to benefit from the investment tax credit for offshore wind as currently configured. Loss of interconnection opportunities on the Central Coast would also reduce renewable resource diversity, with negative consequences for system reliability, and set back efforts to position California for build out at least 10 GW of offshore wind capacity as envisioned in the SB 100 Report.

The CAISO has addressed this issue in written comments on the Federal Energy Commission's (FERC's) Technical Conference on Offshore Wind Integration in RTOs/ISOs (FERC Docket AD10-18). Its submission to FERC states that:

[O]ffshore wind development in the Western United States will likely involve significant resource capacity commitments and long lead times for building the necessary infrastructure. Developing a mechanism whereby a resource can reserve transmission capacity requires additional discussion among stakeholders to address the specific circumstances of these projects. Accordingly, the CAISO recommends [that FERC] not propose a uniform practice or rule. Rather, it should allow individual RTOs/ISOs to explore possible mechanisms, if a need exists, through stakeholder engagement processes.¹¹

OWC recommends that the Commission consult with CAISO and collaborate on interagency and stakeholder discussions needed to assess the need for deliverability rights reservations for offshore wind and implement such reservations, as needed, in a manner consistent with FERC's authority to approve and enforce interconnection provisions of the CAISO tariff. These consultations may benefit from the CAISO analysis of the offshore wind sensitivity portfolio

¹¹ CAISO, Comments of the California Independent System Operator Corporation at 1-2 (May 10, 2021) (FERC Docket AD20-18), available at <http://www.aiso.com/Documents/May10-2021-Comments-OffshoreWindIntegration-AD20-18.pdf>.

included in the 2021-2022 TPP process, which should be completed soon. (See our response to Question 22 immediately below.)

Question 22. Comment on the amount of offshore wind, if any, that should be included in the 2022-2023 TPP base case. Comment on how the results of the 2021-2022 TPP offshore wind sensitivity case should influence this issue.

The Ruling proposes a 38 MMT Core Portfolio that calls for 1,708 MW of offshore wind deployments through 2032. This Core Portfolio, if adopted by the Commission, would be provided “to the CAISO as both the reliability and policy-driven base case scenario” for the 2022-2023 TPP. See Ruling at 23. Ideally, this Core Portfolio would incorporate results from the CAISO analysis of the 8,351 MW offshore wind sensitivity portfolio that the Commission included in its inputs for the 2021-2022 TPP.¹² We understand, however, that the CAISO schedule for completing this analysis – issuance of a draft in November 2021 and a final report in February 2022¹³ – is seen by the Commission as not affording sufficient time for incorporation of that analysis into the Commission’s work on the 2022-2023 TPP inputs. See Ruling at 46.

OWC appreciates the challenge that the Commission faces in completing its work on the 2022-2023 TPP inputs for timely transmission to the CAISO. We urge the Commission, however, to reassess the situation when the CAISO draft results become available and consider whether the CAISO initial findings can be incorporated into the 2022-2023 TPP inputs – even if the only change possible at that point is formulation of a more informed offshore wind sensitivity portfolio. We are concerned that waiting for the conclusion of the next IRP cycle to provide any sort of updated TPP inputs relating to offshore wind, which would then only be taken up by the CAISO in its 2023-2024 TPP cycle, will delay effective transmission planning in ways that could

¹² D.21-02-008 (Feb. 11, 2021), available at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M366/K426/366426300.PDF>. Specifics of the offshore wind portfolio are set forth in Attachment A to that decision, available at <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M359/K000/359000745.PDF>.

¹³ During the September 1, 2021 workshop on the Ruling proposing a Preferred System Plan, Commission staff stated that the CAISO final report on the 8,000 MW offshore wind sensitivity portfolio was not expected until February 2021 and staff would be unable to incorporate new information received at this late date into its modeling and meet its deadline for transmission of the 2022-2023 TPP inputs. CPUC Energy Division, Integrated Resource Planning Preferred System Plan Workshop Questions & Answers at 2 (Sept. 1, 2021) (docket R.20-05-003), available at <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energydivision/documents/integrated-resource-plan-and-long-term-procurement-plan-irp-ltpp/2019-2020-irpevents-and-materials/psp-workshop-slides.pdf>.

prove costly. OWC looks forward to reviewing the thoughts of other commenters on this question and may have additional comments to offer in a reply filing.

III. ADDITIONAL RESPONSE TO THE DISCUSSION OF OFFSHORE WIND IN SECTION 13.1 OF THE RULING

OWC appreciates the Commission's interest in reducing challenges that offshore wind confronts as an emerging LLT resource that can only be developed efficiently in large-scale projects, and its request for suggestions as to "actions the Commission should take specifically to facilitate offshore wind development." See Ruling at 47. Our comments on the Commission's specific, transmission-related inquiries are set out in responses to questions 21 and 22 above. Our comments relating to procurement-related efforts are set out in response to question 14.

In addition to the actions recommended in our responses to those questions, the Commission could advance offshore wind development by using its seat on the Offshore Wind Task Force (see Ruling at 46) to stress the importance of interagency coordination on permits and environmental review to the State's continued progress on offshore wind development. Meeting federal ITC deadlines for commencement of construction and operation is critical to the economics of first-generation offshore wind projects in California – certainly under current law and probably under any revisions that emerge from current Congressional deliberations. As the state agency most responsible for ensuring a cost effective, high-reliability transition to a clean electricity system, the Commission can offer a valuable perspective to other state agencies on the importance of timely action on permitting and environmental review. Leadership by the Commission in this area can help ensure that the State does not, by avoidable delay, deprive its ratepayers of the economic benefits of federal policy support for offshore wind development.

IV. CONCLUSION

OWC appreciates this opportunity to comment on the proposed PSP and the Ruling's questions relating to planning for offshore wind transmission and procurement. We look forward to reviewing the comments of others, filing reply comments, and participating in future stages of the IRP process to share on our perspective on steps the Commission can take to enable offshore wind power's optimal contribution to California's clean energy transition.

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Respectfully submitted,

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