

Offshore Wind California Comments on **CAISO Transmission Planning Process Enhancements** August 5, 2022

Introduction

Offshore Wind California ("OWC") is a trade group of more than 40 companies, including offshore wind developers, technology providers, and consultancies committed to the responsible development of offshore wind power in California. OWC appreciates the opportunity to comment on the California Independent System Operator ("CAISO") Transmission Planning Process Enhancements.

The National Renewable Energy Laboratory ("NREL") reports that California has 200 gigawatts ("GW") of technical potential for generating offshore wind power. The Joint Agency Senate Bill 100 Report ("SB 100 Report"), issued in March 2021, concluded that to reach its goal of 100% clean energy by 2045 California will need to develop a diverse portfolio of renewable energy that includes offshore wind. The "SB 100 Core Scenario" called for 10 GW of offshore wind by 2045, or as much as the model would allow.² The California Energy Commission's ("CEC") August 2022 report now recommends 2 to 5 GW of offshore wind by 2030 and 25 GW by 2045.³ Governor Newsom has recommended similar goals of "at least" 20 GW of offshore wind by 2045.4

Offshore wind power can provide clean, reliable energy that complements the state's solar and other renewable resources and helps keep the lights on for Californians throughout the year. Building offshore wind power capacity will create thousands of high-wage jobs, create new domestic supply chains, enable California to cost-effectively meet its 100% clean energy goals, and also help the state manage its growing climate risks. These benefits can be achieved while protecting marine life and ocean resources. Realizing the full benefits of offshore wind development off the California coast will require sustained federal and state support for deployment at scale. Economies of scale will be key to driving down costs, delivering competitively priced clean power, and encouraging industries and jobs to locate in our state.

OWC Supports CAISO's Transmission Planning Process Enhancements

The CAISO's Transmission Planning Process Enhancements initiative presents an important step towards cost-effectively meeting California's clean energy needs. OWC and its members are

¹ See 2020 Offshore Wind Resource Assessment of the California Pacific Outer Continental Shelf (October 2020) https://www.nrel.gov/docs/fy21osti/77642.pdf

² 2021 SB 100 Joint Agency Report, Achieving 100 Percent Clean Electricity in California: An Initial Assessment (2021) https://www.energy.ca.gov/publications/2021/2021-sb-100-joint-agency-report/achieving-100-percent-cleanelectricity

³ CEC Staff Report: Offshore Wind Energy Development off the California Coast, Maximum Feasible Capacity and Megawatt Planning Goals for 2030 and 2045 https://efiling.energy.ca.gov/GetDocument.aspx?tn=244285 ⁴ July 22, 2022 Letter from the Honorable Gavin Newsom, Governor of California to the California Air Resources

Board. https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf?emrc=1054d6

pleased to see a long-term, strategic transmission planning approach. The CAISO's effort demonstrates its commitment to help achieve a re-imagined, resilient, and reliable grid that provides the necessary enabling infrastructure necessary to meet the state's legislated climate targets and energy policy. The three parts of the initiative include:

- 1) Adjusting the timeline for the release of the draft transmission plans.
- 2) Retaining policy-driven transmission upgrade capacity for the specific policy purpose for which it was developed.
- 3) Coordinating with other planning processes to enable timely approvals for major transmission projects with development timelines that extend beyond the current 10-year planning horizon.

OWC supports all three of these parts of the initiative to streamline the transmission plans, which should improve processes to incorporate offshore wind into the future generation mix of California in coming years.

Adjusting the timeline for the release of the draft transmission plans

OWC understands the need for the proper amount of time to address the "increasing load and resource requirements in the California Energy Commission (CEC) high electrification demand scenarios and California Public Utilities Commission (CPUC) associated resource portfolios" when releasing the draft transmission plans each year.

OWC is interested in working with CAISO to identify and recruit the resources required within the industry to study these cases and allocate the proper time needed when developing transmission plans going forward. Resource training of power engineers to create a pipeline of talent working with academia in future years will be imperative to meeting clean energy goals set forth by California. In addition to increasing resources for these planning efforts, OWC encourages CAISO to maximize use of transmission studies being conducted by OWC members, academic institutions, and the federal government. For example, the Pacific Northwest National Laboratory is currently studying coordinated, planned offshore transmission systems.

II. Retaining policy-driven transmission upgrade capacity for the specific policy purpose for which it was developed

OWC particularly applauds CAISO creating this mechanism to retain capacity for the policy purposes it was originally developed for. To fully harness the benefits of offshore wind, transmission upgrades will be required on the CAISO grid. This will include reinforcements to existing electrical facilities along with the creation of new transmission and substation infrastructure.

When it is identified that these transmission upgrades are required to reliably interconnect offshore wind, the capacity either freed up or developed for offshore wind should be retained by those wind farms to interconnect. Providing this mechanism and assurance to the offshore industry will help towards meeting clean energy policies.

This also comports with rules recently approved outside of the PJM Tariff under which the Federal Energy Regulatory Commission is allowing the reservation for high priority uses of onshore and offshore transmission facilities procured directly by the State of New Jersey with the support of the PJM regional transmission organization.⁵

III. Coordinating with other planning processes to enable timely approvals for major transmission projects with development timelines that extend beyond the current 10-year planning horizon.

OWC supports the process enhancement to develop a mechanism to the plans for and approve projects needed beyond the current 10-year planning horizon. Extending the planning horizon and approving projects in advance of a 10-year planning horizon will be beneficial for the planning of offshore wind farm interconnections, as some upgrades are expected to have a full timeline of study, implementation and installation of greater than 10 years. These public policy transmission needs must not only be studied, but moved to solicitation and award phases so that investments in the grid can be made now and planned to by offshore wind developers.

This planning should not be limited to onshore transmission. Expansion of the grid, both offshore and onshore, is needed to ensure that the state's legislated climate and energy policies can be met in the most efficient and cost-effective manner, ensuring just and reasonable rates. Lessons from the East Coast and a large and growing body of studies from the United States and around the world demonstrate that transmission planning can enable offshore wind that is much more capable and cost effective, while increasing system reliability and mitigating environmental impacts and conflict with other ocean uses. Such plans can also avoid expansive and difficult to site and construct onshore upgrades. Submarine HVDC cables and conversion stations, development of new 500-kV substations and other long lead time transmission projects will need to have construction start dates in the next year or two to have a chance to be ready to meet clean energy goals required in the early 2030s. Approving the projects to start before the current 10year planning horizon is necessary. Start dates for construction should be identified and work commenced on time to meet policy goals.

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OWC appreciates the opportunity to provide comments on the CAISO's Transmission Planning Process Enhancements and looks forward to continuing to support the CAISO's efforts.

⁵ See PJM Interconnection, L.L.C. 179 FERC ¶ 61,024 at PP 9 and 40 (2022).