***Offshore Wind California* Comments on CPUC Inputs and Assumptions (I&A) Modeling Advisory Group (MAG) Webinar**
October 7, 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 Public Utilities Commission ("CPUC") Inputs and Assumption ("I&A") Modeling Advisory Group ("MAG") Webinar presentation.

2. Context and Timing

Slide 7 indicates that staff "made limited I&A updates" in the 2022-23 IRP cycle and will make limited I&A updates for developing the 2023-24 Transmission Planning Process ("TPP") portfolios. As it relates to offshore wind, this energy resource should be included in the IRP at a level that reflects the state's new AB 525 planning goals of up to 5 GW by 2030 and 25 GW by 2045. Otherwise, this will delay proper consideration of timely transmission build out and interconnection.

3.1. Resource Cost Update

Slides 15-18 include modeling for offshore wind but only at Morro Bay. OWC recommends also including analysis for Northern California sites at Humboldt.

The graph on Slide 15, "Total ('All-in') Levelized Fixed Costs" indicates a jump in cost in 2035 for offshore wind. OWC assumes, per the footnote at the bottom of this and later slides, that this is because the cost estimates do not reflect the Inflation Reduction Act ("IRA"). The broadly positive impact of the IRA on offshore wind's Levelized Cost of Energy (LCOE), in particular from 2035 to 2045, is reflected dramatically on Slide 141. OWC asks staff to consider incorporating the IRA's impact in all of its updated offshore wind cost analyses. In addition, OWC recommends that the CPUC consult with the Biden Administration's Floating Wind Shot™ initiative which aims to reduce floating offshore wind costs to $45/MWh by 2035.[1]

Slide 18 on offshore wind costs includes a recommendation to continue to use the NREL 2020 CA offshore wind study for offshore wind resource costs in RESOLVE. It should be noted that the NREL 2020 CA study does not take into account the bulk transmission upgrade costs, observing that, "However, the lack of cost data for bulk transmission upgrade costs might limit the adoption of offshore wind in the CPUC capacity expansion model RESOLVE. This could be particularly relevant for study areas on the North Coast where bulk transmission costs are not accurately represented in RESOLVE." OWC would like to confirm this is understood and that bulk transmission costs are reflected in its modeling.

[1] https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/15/fact-sheet-biden-harris-administration-announces-new-actions-to-expand-u-s-offshore-wind-energy/

3.5. Renewables Characterization Methodology – Resource Potential and Land-Use Constraints

Slide 61 requests stakeholder feedback on the use of the 2022 NREL Study that reflects higher resource potential capacity at Morro Bay and Humboldt Bay. OWC strongly supports the use of the 2022 NREL study in the 2022 I&A process. Given the increase in resource potential, future projected leasing areas should be examined and modeling adjusted to reflect these increased capacity factors, as applicable.

Slide 63 indicates an assumption of 2030 for the First Available Online Year for offshore wind in Humboldt Bay and Morro Bay. An online year of 2030 is critically dependent on the availability of a grid connection by 2029 at the latest. To ensure timely interconnection, work needs to kick off now to permit and build the required upgrades. OWC recommends not waiting for Phase 1 and Phase 2 studies and Large Generator Interconnection Agreements to be signed before initiating this process. Delaying this risks projects in Cluster 15 waiting until at least 2025/26 for transmission upgrade work to be begun. With lead times of 8-10 years, this would delay first power until 2033 or 2035.

4.1. Renewable Characterization Methodology – Generation Profile Creation

Slide 72 describes offshore wind resource generation profiles. OWC appreciates the work staff is doing to work with NREL to fully incorporate and reflect their updated 2022 dataset for offshore wind. OWC looks forward to reviewing the proposed assumptions in the Draft I&A.

4.3. Transmission Constraint Implementation

Slide 84 references the CAISO 2021 Transmission Capability Estimates. This white paper does not show the capacity constraints at Humboldt for offshore wind. They show on-peak load transmission constraints on the 115kV system. Morro Bay is addressing solar constraints on the 230kV system. OWC recommends staff examine whether these assumptions should be revised to account for offshore wind transmission constraints.