

INSIGHTS

CAISO Proposes \$9.2 Billion Transmission Plan, But Offshore Wind Transmission Projects Delayed

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The California Independent System Operator's ("CAISO") [draft 2022-2023 Transmission Plan](#) ("Plan") endorses \$9.2 billion in transmission projects to accommodate the state's projected 40 GW of new resources expected in the next ten years. Given California's clean energy and decarbonization policies, most of these resources are expected to be renewables, including offshore wind located off California's North and Central Coasts following federal lease auctions late last year. The recommendation represents a roughly \$3 billion increase compared to the previous year's transmission plan and reflects the growing need for transmission development to keep pace with renewable energy deployment.

Background

As part of its annual transmission planning process, CAISO develops a transmission plan to identify and prioritize comprehensive solutions to meet the transmission needs within the CAISO footprint. The transmission plan is developed through a stakeholder process and culminates in the CAISO Board of Directors-approved comprehensive transmission plan. Following a December 2022 Memorandum of Understanding between CASIO, the California Public Utilities Commission ("CPUC"), and the California Energy Commission ("CEC"), the Plan "reflects a much more strategic and proactive approach to better synchronize power and transmission planning, interconnection queuing and resource procurement." [\[1\]](#)

Plan's Recommendations

The Plan recommends a total of 46 needed transmission projects. [\[2\]](#) Of these, 24 projects, totaling \$1.76 billion, are reliability-driven projects necessary to reliably supply the increase in forecasted load related to electrification and electric vehicle transportation loads. The remaining 22 projects, totaling \$7.53 billion, are policy-driven projects necessary to meet the renewable generation requirements established by the CPUC's renewable generation portfolios. The policy-driven projects include regional projects designed to bring out-of-state onshore wind resources in Idaho, Wyoming, and New Mexico into the CAISO market. [\[3\]](#)

Offshore Wind

Beginning with the 2021-2022 transmission planning process and the 20-Year Transmission Outlook, CAISO began evaluating the transmission capabilities for integrating offshore wind in the central coast and northern coast areas.^[4] In the 2022-2023 planning cycle, CAISO's analysis assumed a base case of 1,588 MW of wind offshore Morro Bay, increasing to 3,100 MW, and 1,500 MW offshore northern California.^[5] If the Diablo Canyon nuclear power plant retires in 2025, then CAISO expects about 5,300 MW of capacity available to interconnect offshore wind. But, continued operation of Diablo Canyon (as contemplated in recent California legislation) would reduce this capacity to approximately 3,000 MW.^[6] For Northern California offshore wind, which would require significant new infrastructure to connect at a utility-scale, the Plan states that there is no basis for additional transmission capacity in the North Coast area at this time. Still, a related sensitivity portfolio analysis identified a need for new transmission in the North Coast area.

CAISO stated that it was not recommending approval of any offshore wind transmission projects in this planning cycle, instead looking to advance solutions in the next cycle. As explanation, CAISO pointed to the resource portfolios provided to it and California's progress toward developing supply chains, ports, and other supporting infrastructure for offshore wind. CAISO also highlighted that the state's offshore wind strategy remains subject to the [CEC's ongoing AB 525 process](#), culminating in a final report expected in June 2023. CAISO expects to advance transmission upgrades in the next planning cycle to accommodate the state's offshore wind development goals.^[7]

Next Steps

Although issued as a draft, CASIO is expected to adopt the Plan and its recommendations in May 2023. Pursuant to the new coordinated approach described above, the CPUC will direct the state's load-serving entities to focus their energy procurement in the key transmission zones identified in the transmission plan, and CAISO will also give priority to interconnection requests located within the identified zones. A recent CPUC decision established that next year's transmission plan will be based on a projected 70 GW of new generation by 2033. This more than doubling of the expected generation capacity is likely to result in the need for a commensurate level of transmission investments to ensure the timely interconnection of the resources while maintaining grid reliability.

^[1] Plan at 1.

^[2] *Id.* at 5-7.

^[3] *Id.* at 7.

^[4] *Id.* at 17

^[5] *Id.*

[\[6\]](#) *Id.*

[\[7\]](#) *Id.* at 101.