RECHARGE

August 10, 2022

'Ambitious yet achievable' | California raises sails on 25GW US Pacific floating wind voyage

The US flag is lowered during evening colours aboard the aircraft carrier USS Ronald Reagan off California Photo: Official US Navy/Flickr

State energy policy agency recommendations point to first 5GW of deepwater plant turning by 2030 en route to 'maximum feasible' offshore capacity in next decades

By **Tim Ferry**

The US state of California has set far-reaching targets for up to 5GW of floating wind power to brought online by the end of the decade and 25GW by 2045, exceeding the aspirations of even ardent industry supporters, and placing the Golden State on the path towards nationwide leadership in the sector.

The California Energy Commission (CEC), the state regulator in charge of energy policy, today (10 August) released its report to the California Natural Resources Agency and the state legislature per mandate of law **AB525, signed last year by state governor Gavin Newsom**, detailing its finding of the "maximum feasible" offshore wind capacity for the state.

"Today's action solidified the goals as official state policy for planning purposes," a CEC spokesperson told *Recharge*. "No further approvals are required."

"California is home to one of the world's best offshore wind resources... and I am confident that this clean, domestic source of electricity can play an important role in meeting our state's growing need for clean energy," said Newsom, in remarks cited at a business meeting of the CEC.

Last month, **Newsom called on the CEC to raise its offshore wind target to at least 20GW by 2045.**

CEC chair David Hochschild said: "These ambitious yet achievable goals are an important signal of how committed California is to bringing the offshore wind industry to our state", adding: "this remarkable resource will… help us transition away from fossil fuel-based energy as quickly as possible while ensuring grid reliability."

The **CEC initially intended to submit its report 1 June this year**, and as of May had set preliminary targets of 3GW of offshore wind by 2030 and 10-15GW by 2045 and up to 20GW by 2050.

However, calls by stakeholders and think-tanks, including a research team from the University of California Berkeley, urged the policy planners to am higher, to **as much as 50GW by 2045**, and the CEC withdrew its preliminary report to consider more ambitious targets.

Liz Burdock, CEO of sector business development body the Business Network for Offshore Wind, said that the raised targets "marks a significant moment in the path to develop a national floating offshore wind industry".

"The long-term certainty of a 2045 goal will help build investor confidence and attract investments in ports, vessels, and offshore wind manufacturing facilities along the Pacific coast," she said. "A new clean energy industry is born."

The raised targets will provide enough electricity to power 3.75 million homes initially and many as 25 million by mid-century.

"These goals set an ambitious course and show that California is very serious about 'going big' on floating wind, to drive economies of scale and generate the very substantial clean power, climate, and jobs benefits this renewable energy resource can deliver for our state," said Adam Stern, executive director of trade group Offshore Wind California.

"Achieving 5GW of offshore wind by 2030 will position the state to meet and even exceed its 25GW goal by 2045."

This report is the first of several products the CEC must prepare to create a strategic plan for offshore wind energy development as required by state law, and will be followed by reports on economic benefits specific to offshore-wind related port and workforce development, and a third drawing a permitting roadmap for the sector.

“Adopting a goal of 25GW by 2045 sends a critical signal that California is ready to meet this moment—and gives the state’s clean energy companies the green light that we need to get to work, at scale, to provide the clean power Californians are going to rely on for decades to come,” said Alex Jackson, director of American Clean Power-California, an industry lobby group.

California has some of the nation’s top wind resources, estimated by the National Renewable Energy Laboratory at 200GW of technical potential, with wind speeds particularly along the state’s northern coastlines exceeding 9.5 metres per second, as well as a huge economy and population of nearly 40 million to drive demand.

The Bureau of Ocean Energy Management (BOEM), the regulator of energy development in federal waters, has **proposed a lease auction for the end of this year** for 373,000-acres in the Morro Bay and Humboldt wind energy areas (WEA) with up to 4.5GW of capacity which has already attracted 23 qualified bidders, including some of the world’s biggest offshore wind developers, such as Equinor, RWE, Shell and TotalEnergies.

Yet the industry will face multiple hurdles, including **deep waters exceeding 1,000 metres, requiring nascent floating platforms**, as well as a **severe lack of port** or supply chain capacity, qualified personnel, and **transmission infrastructure.**

The CEC based the planning goals primarily on the mandates of SB100 – the 2018 California state law calling for 60% renewable energy by 2030 and 100% clean energy by 2045, as well the need to quickly begin addressing bottlenecks that could derail the industry’s rollout.

“Achieving a 2030 online date for any proposed offshore wind project [to contribute to the state’s 5GW target] will take a significant mobilisation of effort and resources, and timely infrastructure investments, among other factors,” said the CEC.

“The CEC will work with state and federal partners to identify process steps and milestones that could allow for a 2030 online date for California’s first offshore wind projects.”