

The Mercury News

January 25, 2024

Biden administration awards nearly half a billion dollars for Northern California offshore wind project



A 9.5 megawatt floating wind turbine for Scotland's Kincardine Offshore Wind project at its assembly dock in the Netherlands in 2021. (Photo: Offshore Wind California / Principle Power)

\$426 million grant jump starts plans to build hundreds of turbines in the Pacific Ocean, 20 miles offshore

By **PAUL ROGERS** | progers@bayareanewsgroup.com | Bay Area News Group

In the latest significant step for California's efforts to build offshore wind farms in the Pacific Ocean, the Biden administration has awarded nearly half a billion dollars for a project to construct and deploy hundreds of huge turbines to float 20 miles off the state's coast.

The Department of Transportation this week approved awarding \$426 million to the Humboldt Bay harbor district to build a new marine terminal in Humboldt County near Eureka with huge cranes, warehouses and wharfs to assemble and deploy the giant turbines, the first facility of its kind on the West Coast.

Some of the floating turbines could be up to 1,100 feet tall — taller than the tallest skyscrapers in San Francisco and Los Angeles — with huge triangular floating bases bigger than the baseball fields at Oracle Park or Dodger Stadium. The structures are so large they can't fit under the Golden Gate Bridge, which is one reason the more rural Humboldt Bay was selected.

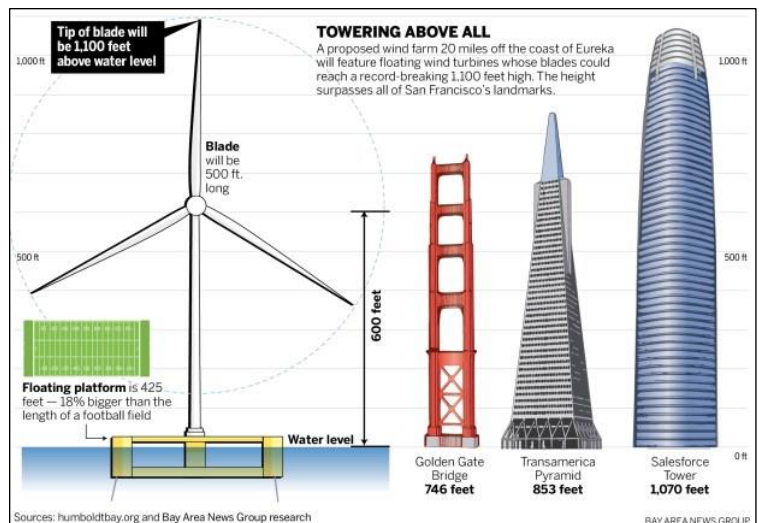
"This is one of the biggest steps forward we've seen so far to realize the promise of offshore wind on the West Coast," said Adam Stern, executive director of Offshore Wind California, an industry association. "The federal grant is a huge signal to the market that offshore wind is going to happen here in our state."

In December 2022, the U.S. Department of Interior awarded wind power leases to five companies that bid \$757 million for two large areas between 20 and 35 miles off Humboldt County and off Morro Bay in San Luis Obispo County.

Gov. Gavin Newsom has said he wants 5,000 megawatts of ocean wind power installed by 2030 — the equivalent of 10 natural-gas fired power plants — as a key part of California's reaching its goal of 100% clean electricity by 2045 to reduce smog and greenhouse gas emissions.

Biden has made offshore wind a centerpiece of his renewable energy plans, setting a national goal of 30,000 megawatts by 2030.

There are currently no offshore wind farms on the West Coast. Major questions remain about how to build the projects in a cost-effective way, including expanding the state's transmission grid to move the electricity to cities, and how to reduce any potential environmental impacts to ocean wildlife.



But having federal funding to build a marine facility to launch the floating wind turbines is a major milestone, supporters say.

Stern said that if offshore wind energy moves forward in California the way it has in Europe and China, it could account for about 15% to 20% of the state's electricity needs in the next 25 years.

The terminal facility in Humboldt Bay is planned for a 180-acre site formerly occupied by a timber pulp mill. In recent decades, the logging industry in the area has declined steadily.

The new offshore wind marine terminal has the potential to significantly revive and diversify the region's economy, said U.S. Rep. Jared Huffman, D-Santa Rosa, whose district includes the area. "Humboldt Bay is going to become a hub of manufacturing and assembling these systems for the rest of California and for Oregon," Huffman said. "We're talking about thousands of good-paying union jobs."

At a news conference late Tuesday near Eureka, local officials agreed. "This is the best thing that I have ever been a part of in my life to make change and ensure a future for our children and our families," said Greg Dale, chairman of the Humboldt Bay Harbor, Recreation and Conservation District. "I'm pretty proud of this."

Huffman said Thursday that a private company, Crowley Maritime, has signed a preliminary agreement to build and operate the facility, offering to match this week's federal grant. The federal money came mostly from the Bipartisan Infrastructure Act, which Biden signed in 2021. The total cost of the Humboldt project is estimated at about \$1 billion, Huffman said, adding that other private, state and federal investment is still being sought.

Local harbor officials say they hope to open the facility in 2029. There already are more than 12,000 offshore wind turbines around the world. Most are in China, the United Kingdom, Germany, the Netherlands and other European countries. "We're behind," said Dan Kammen, a professor of energy at UC Berkeley.

Humboldt and Mendocino counties have among the strongest offshore winds in the United States, he noted. They blow most often in late afternoon and night when energy from solar plants drops as the sun goes down.

"It's the ideal complement to solar," he said. "If you look at the whole landscape — solar, wind, nuclear — the biggest change in the coming five years in renewable energy in California will be the launch of offshore wind."

Unlike most offshore wind farms in Europe and other parts of the world, the turbines will be floating rather than built into the sea floor. The areas where they will be constructed are so far offshore that the water is more than 1,000 feet deep. The towers, which will be anchored to the seabed with cables, will be obscured from the beach by fog, weather patterns and the curvature of the Earth, supporters say.

"By being 20 miles or more out to sea, most of the time people from the shore won't see anything," Stern said. "But on some very clear days, you might see something in the distance that looks like toothpicks on the horizon."

A 9.5 MW floating wind turbine being towed to Kincardine Offshore Wind project off coast of Aberdeen, Scotland.
(Photo by Offshore Wind California / Principle Power)

Opposition from coastal residents has slowed development in the United States, although a few offshore wind farms are beginning to open off New York, Rhode Island and Virginia. Also, Donald Trump opposed offshore wind during his presidency, falsely claiming that the sound of the turbines caused cancer.

The companies holding offshore leases still need to secure permits and approvals from the California Coastal Commission, Coast Guard and other agencies. Stern said that in other countries, studies have shown that the impact on whales, dolphins, birds and other animals is minimal the farther offshore the farms are built.

Environmental groups in California have generally supported offshore wind power but say they are waiting for detailed environmental studies to come out on each project. "We are in support of trying to find ways to expand renewable energy, including offshore wind," said Jason John, acting director of Sierra Club California. "We also want to make sure they are done in the right way."



BAY AREA NEWS GROUP

