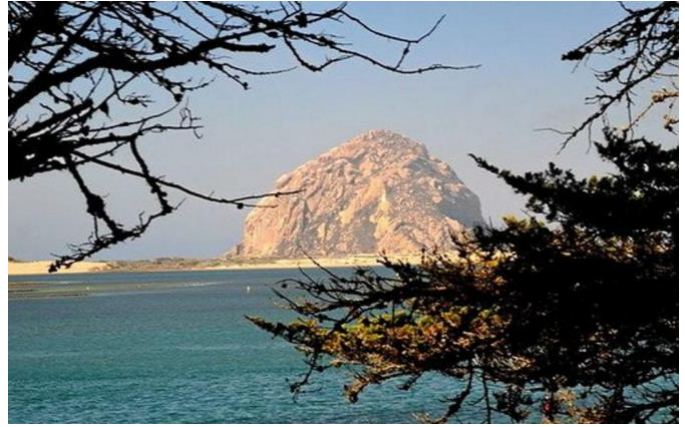


# RECHARGE

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## Could California's cut-price leasing help narrow floating wind's power cost gap?

California's Morro Bay was one of the lease areas mapped out for floating wind development. Photo: Tom Hilton/Flickr



*Lower-than-expected bids for acreage off the Golden State could bring cost of energy more into line with record-setting New York Bight fixed-bottom auction, analysts say*

By **Tim Ferry**

Technical and regulatory hurdles facing floating wind development off California led to unexpectedly low turnout and prices in the recent auction – with knock-on benefits to levelised cost of energy (LCOE) on the cards as a result, according to two leading sector analysts.

Only seven of 43 qualified bidders turned up for five lease areas off Morro Bay and Humboldt WEAs, with five developers paying \$757.1m in total for between 4.6GW- 7.5GW of capacity in a process **that saw acreage change hands** for a fraction of the prices seen in Atlantic rounds earlier this year.

“The lack of offshore wind revenue support programme in California, the need to use nascent floating platform technology, and a non-existent local supply chain can explain the lower prices and turnout,” said Chelsea Jean-Michel, wind energy analyst for BloombergNEF.

California is targeting 2-5GW of capacity by 2030 and 25GW by 2045, but these are not legal mandates. The state also lacks a procurement entity and has severe supply chain, port, and transmission grid constraints – all raising costs and risk.

High costs of floating technology likewise played a role, and BNEF sees capital expenditure (capex) for California floating at \$4m-\$4.98m per MW, compared to \$2.5m-\$3.4m per MW for fixed bottom projects.

“The California projects come at a 50% cost premium,” said Jean-Michel.

However, relatively cheap leases may lead to lower LCOE for floating development in the Golden State that is more in line with the less uncertain, fixed-bottom markets of the New York Bight, according to Danish offshore wind analytics firm Aegir Insights.

The New York Bight auction last February saw prices skyrocket to a record \$4.37bn, driven by nation-leading legal mandates in the adjacent markets of New York and New Jersey of 9GW and 11GW, respectively.

New York Bight areas sold for nearly \$9,000/acre, compared to around \$1,700/acre in California.

“The lease prices add about \$1-\$3 per MWh to the Californian projects, which corresponds to between 1.2% and 4.5% of overall LCOE,” Aegir said in a research note released 18 December. “For comparison, lease prices in New York Bight make up around 10-15%” of the LCOE.

Aegir sees LCOE in Humboldt around \$67/MWh and Morro Bay at \$85/MWh. The research consultancy estimates New York Bight LCOE at between \$68/MWh and \$77/MWh, with \$10 attributed to costly leases.

“The large difference in lease prices between the two auctions may significantly reduce the differences between final LCOE levels [in California and the New York Bight]”, Aegir noted.

The five winners – all US offshore wind industry incumbents – include German utility RWE; California North Floating – headed up by Denmark’s Copenhagen Infrastructure Partners (CIP); Central California Offshore Wind – led by French-Portuguese joint venture Ocean Winds; Norwegian energy group Equinor; and US renewables giant Invenergy.

“Given the unique challenges of the California market, it is really a market for sophisticated players to open up,” Scott Urquhart, CEO of Aegir, told *Recharge*.