

DIRECTION

THE FUTURE OF WIND



TDI-Brooks' NAUTILUS will provide support for offshore wind projects and other subsea needs. (Courtesy: TDI-Brooks)

TDI-Brooks vessel NAUTILUS reaches U.S.

TDI-Brooks' latest dynamic positioning vessel, the RV NAUTILUS, reached the shores of the East Coast of the U.S. March 3. The DP2 vessel RV NAUTILUS from TDI-Brooks, with a length of 75 meters and built in 2000, after undergoing a six-month retrofit in Las Palmas, will provide support for offshore wind projects and various other subsea needs. It is equipped with advanced technology, including a Geomil Manta-200 CPT that can be deployed through the mid-ship moonpool of NAUTILUS. This system can penetrate the soil up to 40-50 meters, depending on its composition, to determine the soil's exact makeup. This data is crucial for identifying the best location and design for offshore developments like wind farms.

TDI-Brooks remains dedicated to the expanding offshore wind sector in addition to various scientific survey initiatives. Despite the robust demand for subsea services and the increasing needs of clients, the company is well-equipped to provide a wide range of offshore support services, including subsea operations, construction assistance, exploration and production support, ROV and diving services, as well as scientific marine research and survey mapping, and military assistance.

The NAUTILUS is a versatile vessel with one North American MCK-1240 upper forecastle deck STBD side SWL 7.1 ton crane, large accommodation (46 berths) and deck capacity. The vessel is outfitted with TDI-Brooks' complete geotechnical tool kit including a suite of innovative geotechnical tools for soil sampling and measurement. These include 0.5 and 1-meter box corers (BC), 6- and 9-meter piston corers (PC), 20-meter jumbo piston corers (JPC), cyclic t-bar instrument (TBAR), piezocone penetrometers including a 40-meter CPT-Stinger and 10-meter Gravity CPT tool (gCPT), newly acquired Geomil Manta-200 CPT, Neptune 3K and 5K vibracorers, and TDI-Brooks' designed pneumatic vibracorer. The Nautilus also has a Teledyne RESON full ocean depth multibeam echosounder (MBES) for performing hydrographic marine,



The wind energy proposal area is 8.4 miles from the New Jersey coast. (Courtesy: BOEM)

surface geochemical “seep-hunting” (SGE) and seabed heatflow surveys (HF).

TDI's mission is to “safely deliver high-quality oceanographic services, including acquisition, sampling, analysis and scientific interpretation, to the marine environmental, geochemical, geotechnical and survey marketplace.”

MORE INFO www.tdi-bi.com

BOEM begins New Jersey wind project review

The Bureau of Ocean Energy Management will initiate the environmental review of a proposed wind-energy project offshore New Jersey, which would deliver clean renewable energy to the region.

On March 18, BOEM published a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the Construction and Operations Plan submitted by Atlantic Shores Offshore Wind, LLC (Atlantic Shores). This is the 12th offshore wind-energy COP environmental review initiated under the

Biden-Harris administration.

At its closest point, the approximately 81,129-acre lease area, OCS-A 0549, known as Atlantic Shores North, is 8.4 miles from the New Jersey coast and about 60 miles from New York.

The Atlantic Shores proposal includes installation of up to 157 wind-turbine generators, eight offshore substations, one permanent meteorological tower, and two temporary metocean buoys — for a total of up to 168 offshore structures. The COP also proposes two potential export cable corridors that would make landfall at: (1) Sea Girt, New Jersey, and (2) in either the New York City area or near Asbury Park, New Jersey.

Since the start of the Biden-Harris administration, the Department of the Interior has approved the nation's first six commercial scale offshore wind projects, held four offshore wind lease auctions — including a record-breaking sale offshore New York and the first-ever sale offshore the Pacific and Gulf Coasts, initiated environmental review of 10 offshore wind projects, and advanced the process to explore additional Wind Energy Areas in Or-



egon, Gulf of Maine and Central Atlantic. The Department has also taken steps to evolve its approach to offshore wind to drive toward union-built projects and a domestic based supply chain.

“BOEM is continuing to implement the Biden-Harris administration’s clean-energy agenda, while maintaining a careful approach to prevent, reduce, and address any adverse effects on ocean users and the marine ecosystem,” said BOEM Director Elizabeth Klein. “As an integral part of our environmental assessments, we will continue to actively solicit feedback from Tribes; federal, state, and local government partners; the fishing community; and the public to help guide our actions.”

MORE INFO www.boem.gov

BOEM finalizes wind-energy area in Maine gulf

In support of the Biden-Harris administration’s goals for deploying 30 GW of offshore wind energy capacity by 2030 and 15 GW of floating offshore wind energy capacity by 2035, the



BOEM’s Maine wind energy area totals about two million acres offshore Maine, Massachusetts, and New Hampshire. (Courtesy: BOEM)

Bureau of Ocean Energy Management (BOEM) has finalized its designation of a Wind Energy Area (WEA) in the Gulf of Maine. The final WEA has the potential to support generation of 32 GW of clean energy, surpassing current state goals for offshore wind energy in the Gulf of Maine: 10 GW for Massachusetts and 3 GW for Maine.

BOEM published a notice in the Fed-

eral Register March 18 that announced its intent to prepare an environmental assessment of potential impacts from offshore wind leasing activities in the WEA. The notice initiated a 30-day public comment period. Another public comment period would occur if BOEM decides to move forward with a lease sale in the WEA.

The WEA totals about 2 million acres offshore Maine, Massachusetts, and New Hampshire, ranging from about 23 to 92 miles off the coast.

BOEM finalized the WEA after extensive engagement with the states of Maine, Massachusetts, and New Hampshire, Tribes, local residents, ocean users including the fishing community, federal government partners, and other members of the public. Based on the feedback received about natural and cultural resources and current ocean uses, the WEA represents an 80 percent reduction from the area BOEM initially identified for possible leasing and a 43 percent reduction from the draft WEA.

The resulting WEA avoids important areas for lobster fishing, North Atlantic right whale habitat, and other important fishing areas and habitats. Additionally, in response to initial con-

versations with Tribal Nations within Maine, the WEA strives to avoid a majority of the historical and present-day fishing grounds of those Tribes.

“BOEM is committed to maintaining strong collaboration with the states of Maine, Massachusetts, and New Hampshire as we advance our efforts in the Gulf of Maine,” said BOEM Director Elizabeth Klein. “We remain dedicated to engaging with Tribal governments, federal and state agencies, ocean stakeholders, coastal communities, and all interested parties as we progress through our environmental review.”

BOEM will seek to avoid or minimize remaining ocean use and resource conflicts in subsequent phases of the leasing process. BOEM will continue to consult with all Tribal Nations, the fishing industry, and other stakeholders who have an interest in the region to understand their concerns with potential offshore wind energy development within the WEA.

During two rounds of analyses to produce the draft and final WEAs, BOEM leveraged the ecosystem-based ocean planning model designed by the National Oceanic and Atmospheric Administration’s National Centers for Coastal Ocean Science (NCCOS). That model incorporates the best available data on Gulf of Maine natural resources, ocean industries such as fisheries and energy production, and national security activities to identify areas with high wind energy resource potential and fewer potential impacts to other ocean users and sensitive environmental resources.

MORE INFO www.boem.gov

Offshore wind report: U.S. capacity increases 800%

The U.S. offshore wind industry’s capacity has grown 800 percent, according to a new report published by the Oceanic Network.

The network has released its 2024 U.S. Offshore Wind Market Report. Among the findings:



The Oceanic Network’s 2024 report includes breaking details on events, market trends, supply chain advancements, and policy changes. (Courtesy: Oceanic Network)

The offshore wind capacity approved for construction by the federal government grew 800 percent — from 0.93 GW to 8.3 GW in 2023.

Developers terminated 51 percent of power contracts in place prior to 2023 and are seeking financial support for another 24 percent.

Despite setbacks, 2023 saw several key announcements of new manufacturing facilities, port infrastructure upgrades, and offshore wind vessels.

States spent much of 2023 working to create interstate cooperation frameworks in order to stabilize regional

markets, lower project costs, and increase economic benefits.

“Global economic challenges hindered our progress in 2023, bringing uncertainty to this new and growing market,” said Liz Burdock, founder and CEO of Oceanic Network. “However, with each step back, we’ve seen the industry press forward and are seeing a transformation in market fundamentals.”

“New power contracts that are resistant to broader economic pressures are being executed and states like New York, New Jersey, and Massachusetts remain dedicated to offshore wind development and investing in a domestic supply chain,” she said. “In 2024, we are seeing the market rebound with interest rates and inflation falling along with new supply chain capacity.”

The report included predictions for the industry in 2024, including the potential for three or more new lease auctions as the Bureau of Ocean Energy Management (BOEM) opens new areas in the Gulf of Maine, Central Atlantic, Oregon Coast, and the Gulf of Mexico.

By December, states could award as much as 15.5 GW of new power offtake, about 60 percent of that will be used to replenish lost contracts. Total capacity that is approved for construction will continue to rise to at least 14.6 GW, the report predicted. ↴

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