

OFFSHORE

IS THE TIDE FINALLY TURNING FOR OFFSHORE WIND IN THE UNITED STATES?

By Jim Wrathall, Van Hilderbrand, Jeffrey Karp, and Morgan Gerard

For more than a decade, offshore wind has been viewed as the next big thing in the U.S. energy mix. In Europe, billions of euros have been invested in 82 offshore wind farms — 10.4 GW of capacity, according to the European Wind Energy Association (EWEA) — roughly equivalent to the power production of 10 large nuclear power plants. Meanwhile, the United States market stalled completely, mired in regulatory uncertainties, litigation, and lack of financing.

However, with the start of construction of the Block Island Wind Farm off the coast of Rhode Island this summer, the sector may finally be emerging. U.S. offshore wind resources are abundant, stronger, and blow more consistently than land-based wind resources, with an estimated 4,200 GW of developable offshore wind potential. Substantial development work already has been undertaken. As of late 2014, the U.S. Department of Energy (DOE) reported 14 offshore wind projects in advanced stages of development in the U.S. with over 4.9 GW of capacity.

U.S. offshore wind resources offer large economic benefits. According to the DOE, deploying 54 GW of U.S. offshore wind power could reduce the cost of electricity in the U.S. by \$7.68 billion a year — equivalent to \$100 per year for a family of four. As seen

in Europe, offshore wind supply chain and construction activities will generate thousands of new jobs, infrastructure development, and related economic growth.

Offshore wind continues to face difficult regulatory and political hurdles in the U.S., including a maze of permitting and environmental laws and requirements. Opposition to offshore wind that is well-coordinated and amply financed by fossil fuel interests focuses on so-called “visual pollution” and harm to birds in seeking to block offshore projects at every level.

These obstacles have been evident in the struggles of the 130-turbine Cape Wind project in the Nantucket Sound off the coast of Massachusetts, which remains in limbo after more than a decade of planning, regulatory proceedings, and litigation. Other proposed projects off the coasts of New Jersey and Delaware have stalled in the face of similar obstacles.

When compared to Europe, U.S. developers also face major financial challenges, including higher costs of building offshore wind farms; the expense of transmission equipment for connecting them to the onshore grid; lack of governmental incentives and policy support; insufficient coordination among state, local, and federal agencies; and the resulting

absence of debt financing necessary to fund the large required capital investments.

However, there are several reasons to believe the sector has reached an inflection point in 2015. Macro energy supply, economic considerations, and climate-related concerns support development of U.S. offshore wind projects (now more than ever), particularly in the New





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England and mid-Atlantic regions. Traditional coal-burning power plants are rapidly being retired, and they're not being replaced. Offshore wind is one of the few resources offering the necessary scale to fill the coming void. Wind energy is also becoming far less costly, given technology improvements, and is increasingly supported by federal and state policies addressing climate change.

Can the U.S. offshore wind market finally turn the corner? Recent developments suggest that it could.

U.S. OFFSHORE WIND BREAKS GROUND

A great deal of attention has been focused on the first commercial-scale offshore wind project to commence construction — the 30-MW Block Island Wind Farm

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off the coast of Rhode Island. Deepwater Wind, the project developer, estimates the project will generate over 100,000 MWh of energy annually. The project is expected to begin producing energy in late 2016.

Also, in late July, the Bureau of Ocean Energy Management (BOEM) approved DONG Energy's acquisition of a 25-year commercial wind lease area in federal waters 55 miles off the coast of Massachusetts from RES Americas. The project could accommodate more than 1 GW of installed capacity. DONG Energy's entry into the U.S. market is significant. Majority-owned by the Danish government, DONG is a heavy-weight in European waters with about one-third of the offshore installations there. Earlier this year, DONG received an equity investment from Goldman Sachs,

reportedly giving Goldman an 18 percent stake in the company. Goldman has been a leader in innovative project finance and public-private partnerships in other sectors. There is little doubt that it will pursue a comprehensive U.S. strategy to support its investment in offshore wind.

Beyond these recent developments, several broader market and regulatory features are evolving to support U.S. offshore wind, including those listed here.

IMPROVED TURBINE SIZE, PERFORMANCE, AND RELIABILITY

The massive investments in Europe have driven major technology improvements. Turbine size and power output have substantially increased. For example, earlier this year, Siemens announced a new prototype turbine that in-

creased capacity from 6 to 7 MW, using new magnet-based generator technology that eliminates gearing, and reengineered converter and transformer technologies, improving output by more than 10 percent. The Siemens system is optimized for reactive power compensation, contributing grid stability functions that are vitally important in regions such as New England and the mid-Atlantic.

Also, the Danish wind giant Vestas has deployed an 8-MW turbine as part of a joint venture with Mitsubishi Heavy Industries. In May, Vestas announced that a prototype set a new benchmark for power production, generating 192,000 kWh in a 24-hour period — enough to power approximately 13,500 Danish households. As recently as 2014, industry consultants were projecting that average turbine sizes would re-



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main around 5 MW for pending U.S. projects. If the larger and better-performing European turbines can be rapidly deployed, that alone can be a game changer for the U.S.

PERMIT STREAMLINING

The Cape Wind project was expected to lead the way in opening the U.S. offshore wind markets. However, the project is stalled for the moment, entirely due to economic issues, as the off-takers withdrew from their power purchase agreements. Prior to that point, the project did successfully resolve regulatory and legal uncertainties, including securing all federal and state permits. Cape Wind shows the benefits of centralized federal agency jurisdiction and streamlined permitting under the provisions of the Energy Policy Act of 2005 that

established permitting authority in the BOEM.

The Block Island project has clearly benefited from lessons learned by Cape Wind. Just two years after lease approvals, Deep-water Wind already has “steel in the water” as a result of collaborative efforts of state regulators and BOEM. The federal agency timely awarded a right-of-way grant for an 8-nautical-mile-long, 200-foot wide corridor in federal waters on the outer continental shelf for transmission to connect the wind farm to the mainland.

IMPROVING REGULATORY AND POLITICAL CLIMATE

The Obama Administration continues to support offshore wind. The DOE has promulgated a national plan calling for deployment of 10 GW of offshore wind capacity by 2020 and 54 GW by 2030.

DOE's Offshore Wind Innovation and Demonstration Initiative has several pilot projects designed to demonstrate offshore wind power technology advancements. BOEM also has implemented a streamlined integrated siting and permitting program called “Smart from the Start,” which has been a major aspect of the acceleration in project review times.

U.S. federal climate policy is generating further support. On August 10, the U.S. Environmental Protection Agency (EPA) announced final regulations implementing the Clean Power Plan (CPP), mandating states to achieve a 32-percent reduction from 2005 carbon emission levels from existing power plants by 2030. Many of the New England and mid-Atlantic states are viewing offshore wind as a key compliance measure. CPP requirements

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also can be met through state and regional trading programs, which are expected to generate new forms of bankable credits, thus providing further financial support for investments in offshore wind.

The broader political dynamic for offshore wind remains uncertain. There is some chance federal tax incentives will continue with the Production Tax Credit (PTC) extender bill passing the Senate Finance Committee on July 21. On August 12, Senators Tom Carper (D-Del.) and Susan Collins (R-Maine) reintroduced the Incentivizing Offshore Wind Power Act creating a tax credit for the first 3,000-MW offshore wind facilities placed into service. While the bill has little chance of being passed on its own, there is some potential that it could be rolled into comprehensive energy or tax reform legislation in the full Senate this fall. However, prospects for PTC extension or enactment of an Offshore Wind Investment Tax Credit this year will be tempered by the strong ideological opposition by Republicans controlling both the House and the Senate.

State level programs and incentives may be even more critical in providing revenue certainty to make projects viable and attractive to the equity and debt investors. States such as Massachusetts, New York, Rhode Island, Maine, Maryland, New Jersey, and Virginia are continuing to consider policies providing revenue certainty and financial support. Such incentives may include Offshore Renewable Energy Certificate (OREC) programs, centralized procurement processes and supply chain initiatives, targeted infrastructure development legislation, and programs providing financial support for private sector debt finance of new offshore projects.

For example, the Maryland Offshore Wind Energy Act of 2013 cre-

ated an OREC system and mandated that if an offshore wind project is constructed, Maryland utilities will be required to procure up to 2.5 percent of their portfolio from offshore wind energy as early as 2017. A key political concern for these programs is ensuring ratepayer protection. The Maryland bill capped increased charges that could be passed along by the state's utilities at an additional \$1.50 per month on ratepayers' electricity bills.

In March, the New York State Energy Research and Development Authority (NYSERDA) released a report concluding that with full support for offshore wind, the state can see price cuts of more than half by 2020, resulting from the use of larger turbines and cost reductions achieved by economies of scale. The Long Island-New York City Offshore Wind Collaborative is working on a utility-scale project to be located about 15 miles off the Rockaways on Nassau County's southern shore.

In Massachusetts, proposed legislation would enable offshore wind projects to access investment-grade financing, as it would require local utilities to conduct four joint solicitations for offshore wind beginning October 1, 2016, and to enter into 20- to 30-year contracts with developers, provided the terms and prices of the responses are "commercially reasonable." These ensured long-term contracts would increase security of payback for lenders.

States also may be able to do more to support project debt through public infrastructure finance. For example, New York's Green Bank has received over \$360 million in funding for renewable energy projects. As the Natural Resources Defense Council noted in a recent white paper, "It would be a powerful market precedent if the New York Collaborative — LIPA, NYPA, and Con Ed — were able to bundle New

York Green Bank anchor financing together with lease and power purchase agreements and then competitively bid the entire package. This combination of revenue certainty, site control, and anchor financing would likely produce very competitive bids and low costs of delivered energy." Major private sector participants such as Goldman Sachs will likely bring other innovative approaches to bear in supporting long-term wind project financing.

ADDITIONAL LEASES

The availability of lease sites — a crucial factor for successful project development — also appears to be trending upward. BOEM, in conjunction with several coastal state governments, is poised to reopen the procurement process for additional leases in New York and New Jersey, while stakeholders presently are being engaged in North Carolina and South Carolina. Acquiring projects in mid-development also is an option, although proposed lease assignments are subject to approval by BOEM.

IMPORTANCE OF A DEVELOPED SUPPLY CHAIN

The success of offshore wind in Europe illustrates the importance of achieving critical mass in developing infrastructure and distribution to drive down costs. Here in the U.S., a number of states and organizations are working on this front. According to Liz Burdock, the executive director of the Business Network for Offshore Wind, "State offshore wind policies are really economic development policies. Denmark started with 10 offshore wind turbines; now more than 56,000 people are employed in the Danish wind industry. States must work together to build a pipeline of projects, which will incentivize the scale required to reduce costs

and decrease risk so companies can make the necessary long-term investments required. Many U.S. companies are evaluating how they can pivot into the offshore wind supply chain. As the U.S. market emerges, the Business Network will help companies develop innovative technologies and processes and export to the €180 billion global offshore wind industry. It is important that we enhance U.S. business expertise and build out the supply chain now; otherwise, when commercial-scale U.S. projects go to construction, the work will be done by European firms."

PROGRESS IN OFFSHORE WIND ENERGY TRANSMISSION CAPACITY

Historically, U.S. offshore wind projects have been constrained by the lack of transmission capacity, requiring them to provide and finance their own infrastructure for transmission of wind energy to onshore uses. Progress is being made on the build out of the Atlantic Wind Connection, an undersea high-voltage transmission line that would provide a backbone to connect offshore projects extending from New York to Virginia. The first phase is scheduled to begin construction in 2016.

MATURING ONSHORE U.S. WIND MARKETS

Onshore wind energy has turned a corner in the U.S., reaching major milestones for market penetration, reduced costs, and job creation. The DOE recently reported that wind prices have hit an all-time low, with average levelized long-term prices at approximately 2.5 cents/kWh for projects contracted in 2014. Wind has comprised 33 percent of all new U.S. electric capacity additions since 2007, according to the DOE. With the maturation of the onshore

sector, it can be expected that political support for nascent offshore projects will grow as well.

AVAILABILITY OF FINANCING

Obtaining financing for large offshore wind projects is a challenge. Banks and equity investors are wary of new technologies and the risks perceived to be associated with offshore wind energy. Yet the landscape appears to be shifting on the financing front as well. The Block Island project secured \$290 million in debt and equity financing earlier this year. Given the relative speed with which the Block Island regulatory approvals were obtained, regulatory risks may become less of a concern for investors.

A 68-turbine project is being planned by US Wind, Inc., off the coast of Ocean City, Maryland, capable of generating 500 MW of electricity. To cover the project's nearly \$2.3 billion cost, the company plans to pursue a mix of financing mechanisms including substantial OREC financing to be repaid after the turbines are constructed and operating. Another project from the same developer as Block Island, Deepwater Wind, is Deepwater ONE, also in the Rhode Island Sound. This planned 150-200 turbine project will be capable of generating from 900 to 1,200 MW. Success in obtaining financing for these larger projects will be a key barometer indicating real progress.

CONCLUSION

Major deployment of offshore wind in the U.S. will require further progress in many of the areas discussed here. Given the economic, energy supply, and climate imperatives, however, there appears to be strong momentum building toward the long-awaited breakthrough in U.S. offshore wind capital investment and project development. ♫

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Members of the Energy Finance Practice have substantial experience in onshore and offshore wind energy matters. Representative matters include: represented the Conservation Law Foundation in support of the Cape Wind offshore wind project off the coast of Massachusetts, including in federal court litigation, administrative, and regulatory matters; served as North American counsel for a major vertically integrated renewable energy company, advising on offshore wind joint venture structuring, debt and equity investments, and regulatory matters; advised developers with respect to proposed offshore wind projects off the coast of New Jersey; represented an infrastructure development, management, and operations company building out a portfolio of wind power generation assets; performed due diligence supporting the purchase of a controlling interest in a 450-MW portfolio of three wind projects by the infrastructure fund of a major U.S. bank; and represented a leading European bank as lender to a nearly 400-MW wind generating facility in Texas.

For more information, go to <http://www.sandw.com/practices-area-Energy.html> or visit the firm's blog, the Energy Finance Report, at <http://www.energyfinanceareareport.com>.

HISTORIC MILESTONE FOR AMERICA'S FIRST OFFSHORE WIND FARM

Block Island Wind Farm completes and installs first of five steel foundation jackets



In a historic moment for the American offshore wind industry, the Block Island Wind Farm has reached its “steel in the water” milestone with the installation of the first wind farm foundation component.

Deepwater Wind’s offshore foundation installation contractor set the first, 400-ton steel jacket on the sea floor on Sunday, July 26, at the wind farm site, roughly 3 miles off the Block Island coast. A joint venture between Weeks Marine and Manson Construction is serving as Deepwater Wind’s offshore foundation installation contractor.

Deepwater Wind’s leaders were joined on July 27 by Rhode Island Governor Gina M. Raimondo, U.S. Secretary of the Interior Sally Jewell, U.S. Bureau of Ocean Energy Management Director Abigail Ross Hopper, the state’s congressional delegation, and more than a hundred other elected officials, leaders of national environmental advocacy organizations,

federal and state regulators, Block Islanders, and project supporters to celebrate the milestone during a ferry tour of the offshore construction site.

“We know the world is watching closely what we do here, and we’re incredibly proud to be at the forefront of a new American clean-tech industry launching right here in the Ocean State,” said CEO Jeffrey Grybowski. “This moment has been years in the making – and it’s just the start of something very big.”

This first of five foundation installations kicks off a busy construction period for the 30-MW Block Island Wind Farm. During the roughly eight-week construction period this summer, more than a dozen construction and transport barges, tugboats, crew ships and monitoring vessels will be active at the offshore construction site. ↴

— Source: Deepwater Wind

SECRETARY JEWELL AND DIRECTOR HOPPER LAUD CONSTRUCTION OF NATION'S FIRST OFFSHORE WIND FARM

As part of President Obama's Climate Action Plan to create American jobs, develop clean energy sources, and cut carbon pollution, U.S. Secretary of the Interior Sally Jewell and Bureau of Ocean Energy Management (BOEM) Director Abigail Ross Hopper joined Rhode Island Governor Gina M. Raimondo, the state's congressional delegation, and representatives of Deepwater Wind — the project developers — in celebrating America's first commercial scale offshore wind farm.

"Interior is proud to be a partner in this historic milestone for offshore renewable energy," Jewell said. "Deepwater Wind and Rhode Island officials have demonstrated what can be accomplished through a forward-looking vision and good working partnerships. Block Island Wind Farm will not only

tap into the enormous power of the Atlantic's coastal winds to provide reliable, affordable, and clean energy to Rhode Islanders, but will also serve as a beacon for America's sustainable energy future."

"As the Nation's pioneering offshore commercial wind farm, the lessons learned from the Block Island project about facility design, fabrication, and installation will inform future projects to be developed on the Outer Continental Shelf," Hopper said. "This is an exciting development for Block Island and also demonstrates the way forward for wind energy in federal waters off America's coasts."

Also participating in the celebration were Rhode Island's U.S. Senators Jack Reed and Sheldon Whitehouse and U.S. Representatives Jim Langevin and

David Cicilline; Deepwater Wind's CEO Jeffrey Grybowski; members of the state General Assembly; representatives of the U.S. Army Corps of Engineers; and members of the environmental community. The celebration included a boat tour of the project site to provide a close look at the turbine foundation work underway.

Deepwater Wind is constructing a five-turbine, 30-MW wind farm in state waters about 3 nautical miles southeast of Block Island. At 589 feet above sea level, the turbines will be among the tallest in the world. The project, scheduled to be online in 2016, is expected to power about 17,000 homes. The facility will provide electricity directly from the wind farm to Block Island. Because the island uses only 1 MW of power in the off-season



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and 4 MW in the summer peak season, the remaining 90 percent of the energy produced during the off-season will be sent to other state customers via a 25-mile bi-directional submerged transmission cable between Block Island and the Rhode Island mainland.

Eight miles of the transmission line cross federal waters. After determining that there was no overlapping competitive interest in the proposed right-of-way area on the Outer Continental Shelf and conducting an environmental review, BOEM issued a right-of-way grant to Deepwater Wind Block Island Transmission System, LLC, in 2014.

The wind farm will produce more than 100 million kWh of clean energy annually, and Deepwater Wind will sell the electricity through a Power Purchase Agreement to National Grid, a Rhode Island utility. Project developers estimate the wind farm will reduce electric costs by 40 percent for the average ratepayer on Block Island, which currently relies on expensive diesel-powered generators. With the transmission line, Block Island has no need for backup diesel generators, as it can purchase electricity from National Grid once the cable is laid.

Because the project will be sited in state waters, the U.S. Army Corps of Engineers was the lead federal agency

for analyzing the potential environmental effects of the project under the National Environmental Policy Act (NEPA). In addition to issuing the right-of-way grant, BOEM was a cooperating agency in the NEPA analysis and associated consultations led by the Corps.

To date, BOEM has awarded nine commercial wind energy leases off the Atlantic coast: two noncompetitively issued leases (one for the proposed Cape Wind project in Nantucket Sound offshore Massachusetts and one offshore Delaware) and seven competitively issued leases (two offshore Rhode Island-Massachusetts, two offshore Massachusetts, two offshore Maryland, and one offshore Virginia). The competitive lease sales generated about \$14.5 million in winning bids for more than 700,000 acres in federal waters. BOEM is expected to hold an additional competitive auction for a Wind Energy Areas offshore New Jersey later this year.

Spurring responsible development of offshore wind energy is part of a series of Obama administration actions to increase renewable energy both offshore and onshore by improving coordination with state, local, and federal partners. Since 2009, the DOI has approved 56 wind, solar, and geothermal utility-scale projects on public

or tribal lands, including associated transmission corridors and infrastructure to connect to established power grids. When built, these projects could provide about 14,600 MW — enough energy to power nearly 4.9 million homes and support more than 24,000 construction and operations jobs.

The success of the Block Island project was enabled by the strong support of state and local leaders who developed early policies for the planning and proper siting of the wind farm as part of the state's overall renewables goals and marine spatial planning efforts. Beginning with Governor Donald Carcieri and continuing with Governor Lincoln Chafee, and now-Governor Gina M. Raimondo, Rhode Island's top officials have all supported offshore wind and the development of the Block Island Wind Farm. Rhode Island's Congressional delegation also supported federal tax and permitting policies important for this project and industry. Deepwater Wind worked closely with federal and state agencies and local environmental groups in developing a groundbreaking set of construction rules to minimize any impacts on marine mammals.

Maps and additional information on this project are available on DOI's website. ↴

— Source DOI

COASTAL CAROLINA SCIENTISTS WORK ON WIND ENERGY STUDIES

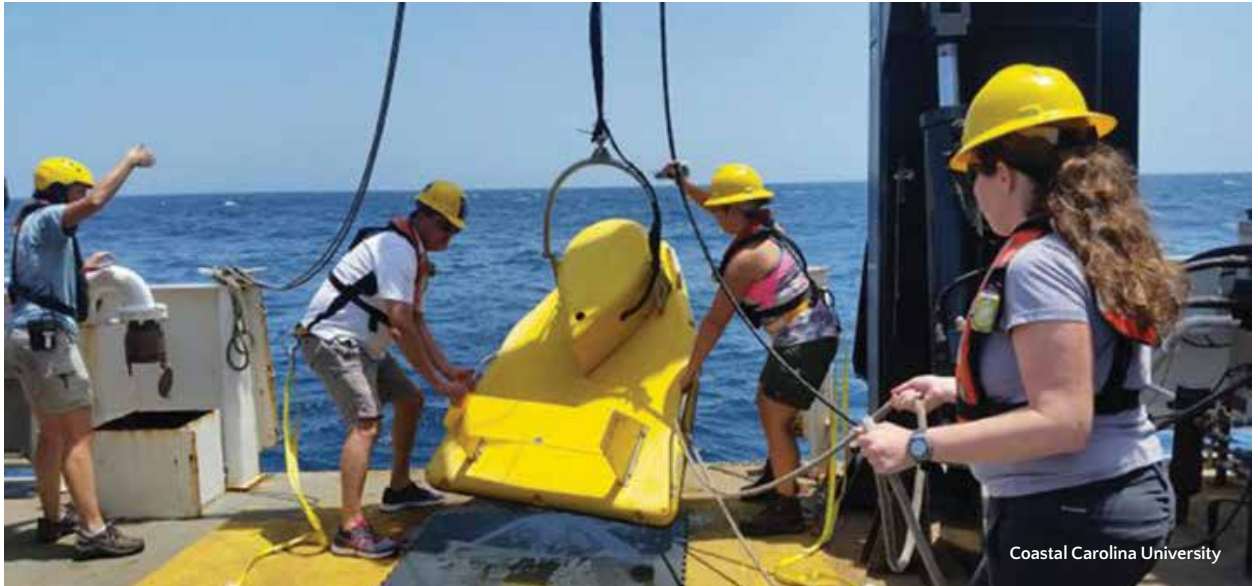
Coastal Carolina University (CCU) scientists deploy the instrumentation buoy at the McManus Reef off North Myrtle Beach

CCU's School of Coastal and Marine System Science (CMSS) is deploying its meteorological and oceanographic instrumentation buoy to support long-term student research at the McManus Reef off North Myrtle Beach. The buoy system will also be part of broader experiments continuing the school's work on evaluating the potential for wind energy development off South Carolina's coast.

The CMSS faculty, staff, and students deployed the instrument system to feed near real-time measurements

that will support wind energy studies for validation of CCU's interactively coupled ocean, wave, and atmospheric modeling system. The system will also feed into the National Weather Service's weather modeling system.

CCU, the University of South Carolina, and the South Carolina Institute of Archaeology and Anthropology received \$1.5 million in federal and state grant money to use the school's geophysical mapping



system to characterize areas that wind developers should embrace or avoid off the coast.

According to Paul Gayes, the director of the school and the lead technical investigator, the project will use continuous geophysical mapping of certain portions of the ocean floor to determine what wildlife habitats and cultural resources are just off the coast.

The Coastal Explorer, CCU's 54-foot aluminum research vessel, is assisting in deployment of the buoys and transportation to help with the complex operation.

The buoy at Ron McManus Reef and a second instrument system installed off Frying Pan Shoals

Light Tower — 25 miles offshore of Cape Fear — was deployed from the National Oceanic and Atmospheric Administration (NOAA) ship, the Nancy Foster, during a cooperative fishery habitat survey conducted by NOAA and CCU scientists. The cruise is supporting two coastal marine and wetlands studies (CMWS) master's degree projects and aiding in the improvement of mapping of critical habitat in the region. ↴

— Source: Coastal Carolina University

SIEMENS TO BUILD WIND POWER PLANT IN CUXHAVEN, GERMANY

Siemens has invested roughly €200 million (approximately \$221 million) to build its first production facility for offshore wind turbine components in Germany. The factory will manufacture nacelles for the company's next-generation wind turbines. These wind turbines are designed for use at sea and have a capacity of 7 MW. The new factory in Cuxhaven will be one of Siemens' most significant new production facilities in Germany in recent years and will create up to 1,000 new jobs. The

groundbreaking is scheduled to take place later this year with production of the first components to begin in mid-2017.

"The decision to build a new production facility in Cuxhaven represents a clear commitment to Germany as a business location," said Joe Kaeser, president and CEO of Siemens AG. "The new Siemens factory will employ up to 1,000 skilled employees. The expansion of offshore wind power capacity in Germany and Europe represents an enormous oppor-

tunity for northern Germany and Siemens."

The planned production facility will have a surface area of 170,000 square meters and will be located directly at the edge of Cuxhaven's well-developed harbor, allowing heavy components to be loaded directly onto transportation vessels, thereby avoiding expensive ground transportation. The new factory will handle the final assembly of generators, hubs, and nacelle back-ends, which are all connected to form complete



nacelles — the core of offshore wind turbines. While evaluating the new manufacturing location, the company also intensively examined the possibilities for investing in existing locations that are being impacted by structural transformations

“We’re looking forward to building at this factory the most efficient and reliable ‘made-in-Germany’ wind turbines,” said Markus Tacke, CEO of Siemens’ Wind Power and Renewables Division. “We invest where we see opportunities for growth, and

Germany and Northern Europe are dynamic growth markets for us. The new factory will also make an important contribution toward helping us reach our goal of making wind power competitive.”

A recently published study by the Renewable UK industry association shows that the costs of offshore wind power have declined by 11 percent over the last five years alone.

In addition to the new facility in Cuxhaven, Siemens is also currently constructing a plant for rotor blades in Hull, United Kingdom, for 6- and 7-MW class wind turbines.

This plant is also scheduled to be fully operational in 2017. Germany is the most significant market for offshore wind power after the U.K.

Siemens is the market leader in the offshore wind power industry. To date, the company has sold around 3,100 wind turbines and installed at sea more than 1,470 turbines with a total capacity of 4.7 GW. Siemens is also a leader in offshore grid connections and offshore service. ↘

— Source: Siemens

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CWIND SECURES O&M VESSEL CONTRACT AT LONDON ARRAY OFFSHORE WIND FARM



London Array

London Array Operational

CWind, a leading provider of integrated services to the wind industry, has announced that it has been awarded a contract for the supply of two crew transfer vessels to the London Array offshore wind farm (OWF) supporting operation and maintenance (O&M) activities.

London Array OWF is located 20 km off the Kent coast in the outer Thames Estuary. Both workboats, the CWind Alliance and CWind Artimus, will be operating from Ramsgate in Kent. CWind Alliance is familiar with the site and in 2013 received a recognition by Siemens for its outstanding vessel performance on site. During its first stint at the project, CWind Alliance completed 6,000 hours of service. CWind Alliance delivered an impressive 363 days of operation on the London Array OWF in 2012.

The O&M contract at London Array OWF is the first assignment

for CWind Artimus after being named at Seawork 2015 last June. The 22-m crew boat powered by IPS is capable of carrying up to 30t payload or 24,000 liters of fuel, expanding cargo capacities and nautical range.

"We're very pleased to return to London Array and support their O&M activities," said Bruce Clements, business development manager at CWind. "We are delighted to have won this contract following a challenging competitive tender process and we look forward to working with London Array Ltd and its partners over the coming years. This contract award is further recognition of our innovative vessel solutions providing our customers in O&M with a winning combination." ✍

— Source: CWind

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