



The Offshore Wind Round-Up

Created by the JCTA

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IN THIS ISSUE

- For the first time, two offshore wind farms are **sending power to the U.S. grid**. Details begin [on this page](#).
- Information about article that includes **photos and a description** of how offshore wind turbines are constructed and installed begins [on page 3](#).
- An update about the Bureau of Ocean Energy Management's (BOEM's) release of the final **Environmental Impact Statement** for Atlantic Shores Offshore Wind begins [on page 3](#).
- **Two new offshore wind farms** have been approved off the coast of New Jersey. Details begin [on page 4](#).
- Research continues in an effort to identify and quantify the impacts of offshore wind farms on **sea creatures**. Information from a recent study and a summary of its key findings begin [on page 5](#).

PLEASE NOTE

Publication of the Offshore Wind Round Up is taking a pause in March, with the next issue expected to appear in April.

OFFSHORE WIND FARMS SEND POWER TO THE U.S. GRID FOR THE FIRST TIME

From the Associated Press ("AP") published January 3:

"For the first time in the United States, turbines are sending electricity to the grid from the sites of two large offshore wind farms.

The joint owners of the **Vineyard Wind project**, Avangrid and Copenhagen Infrastructure Partners, announced [today] the first electricity from one turbine at what will be a 62-turbine wind farm 15 miles (24 kilometers) off the coast of Massachusetts...."

Danish wind energy developer Ørsted and the utility Eversource announced last month that their first turbine was sending electricity from what will be a 12-turbine wind farm, **South Fork Wind**, 35 miles (56 kilometers) east of Montauk Point, New York."

Access the full AP report by clicking on this link

<https://abcnews.go.com/Business/wireStory/large-offshore-wind-sites-sending-power-us-grid-106073154>

Who are the owners of these two wind farms?

- **Avangrid** is a utility holding company headquartered in Orange, Connecticut that owns 8 northeast electric and gas utilities including NY State Electric & Gas (NYSEG) and United Illuminating (UIL). Avangrid Renewables owns renewable energy projects throughout the US.

Access the Company Profile section from the Avangrid website by clicking on this link

www.avangrid.com/aboutus

- From the same AP report: “**Copenhagen Infrastructure Partners** [headquartered in Copenhagen Denmark] is a large fund manager and global leader in renewable energy investments.”
- **Ørsted**: Headquartered in Denmark, the company, with a different name, was created in 1973 and focused on the gas and electricity markets. From the Ørsted website: “In 2008, we [began to] transform from being a fossil fuel-based to a renewable energy company, and we began investing massively in the development and build-out of offshore wind farms in Denmark and abroad.” The company changed its name to Ørsted in 2017 and it is listed on Nasdaq Copenhagen.
- From Wikipedia: “**Eversource Energy** is a publicly-traded Fortune 500 energy company headquartered in Hartford CT and Boston MA.” Eversource owns 6 northeast utilities including Connecticut Light & Power and Boston Edison. From the Eversource Energy website: “We’re New England’s largest energy delivery company with 4 million customers in Connecticut, Massachusetts and New Hampshire.”

What’s next?

- **Vineyard Wind (MA)**. From the January 3 AP report: “Five turbines are installed there. One turbine delivered about 5 megawatts of power to the Massachusetts grid just before midnight [today]. The other four are undergoing testing and should be operating early this year.”
- **South Fork Wind (NY)**. Per a December 23, 2023 press release from NY Governor Kathy Hochul, “The project has completed the installation of two turbines, with one operational, approximately 35 miles off Montauk with all 12 turbines expected to be installed by early 2024.”

Access the full press release from Governor Hochul’s office by clicking on this link

<https://www.governor.ny.gov/news/governor-hochul-announces-south-fork-wind-delivers-first-offshore-wind-power-long-island>

HOW OFFSHORE WIND TURBINES ARE CONSTRUCTED: A DESCRIPTION WITH PHOTOGRAPHS

--- **The headline** in a January 11 article published in *The New York Times* (NYT) says it all: “Take a Look at the First Offshore Wind Farm to Power U.S. Homes.” The wind farm with this distinction is South Fork Wind located 30 – 35 miles off the coast of Long Island, as mentioned in the first section in this Round-Up.

--- **The narration** highlights the steps necessary to produce and construct offshore wind turbines, beginning with the manufacture of components in factories on land through the assembly of those components at sea.

--- **The photographs** include an array of images. Highlights include the State Pier in New London CT where union members unload manufactured components arriving by cargo ships from Europe, a barge on which the components travel out to sea and the jack-up ship, which, as the name implies, raises itself up to transform into a work platform while at sea.

Access the full NYT article by clicking on this link

https://www.nytimes.com/interactive/2024/01/11/nyregion/ny-wind-farm-south-fork.html?campaign_id=9&emc=edit_nn_20240112&instance_id=112334&nl=the-morning®i_id=58724456&segment_id=155016&te=1&user_id=6236399d517a9d70064e65f40c5d6192

UPDATE: RELEASE OF THE FINAL ENVIRONMENT IMPACT STATEMENT FOR ATLANTIC SHORES WIND

--- **February 9, 2024** was the most recent target date announced for the publication of the official notice of availability for the final Environmental Impact Statement (“EIS”) in the Federal Register. That date would also be the beginning of the public review period, which extends for a minimum of 30 days.

As of 9 am Monday February 12 when this Round-Up was released for distribution, the notice of availability for the final EIS had not been announced and no revised date of release had been posted.

--- **Keep checking the Permitting Dashboard**, an official website of the U.S. government, for updates. It is wise to check this website frequently.

From its website: “Federal agencies, project developers and interested members of the public use this website to track the federal government’s environmental review and authorization processes for large or complex infrastructure projects.”

Access The Permitting Dashboard by clicking on this link

<https://www.permits.performance.gov/permitting-project/atlantic-shores-south>

March 25, 2024 was the most recent target date listed for the issuance of the final EIS, presuming a February 9 release date. This March date was still shown on the Permitting Dashboard as of 9 am Monday February 12.

Access details about the full EIS review process from the website of the U.S. Environmental Protection Agency by clicking on this link

<https://www.epa.gov/nepa/national-environmental-policy-act-review-process-#:~:text=Summary of the EIS Process&text=A draft EIS is published,if necessary, conduct further analyses.>

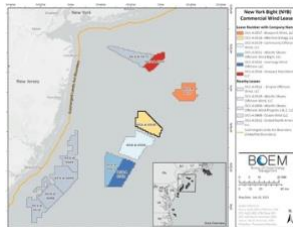
TWO NEW OFFSHORE WIND FARMS OFF THE COAST OF NEW JERSEY AWARDED OREC CONTRACTS

From the Asbury Park Press January 24:

- “New Jersey officials approved **two new offshore wind projects** off the Jersey Shore on [January 24], projects they expect will power 1.8 million homes across the state. The [NJ] state Board of Public Utilities approved offshore wind renewable energy certificates, or ORECs, to
 - **Leading Light Wind**, a 2,400-megawatt project about 40 miles east of Atlantic City. [In the map below, Atlantic Shores Offshore Wind is the area to the west, the top 2 sections.]



- **Attentive Energy Two**, a 1,342-megawatt project 50 miles east of Barnegat Light.” The project is the yellow area on the map below. Atlantic Shores Offshore Wind is the top 2 sections of the light blue area to the southwest.



Access the full Asbury Park Press article by clicking on this link

<https://www.app.com/story/news/local/land-environment/2024/01/24/nj-officials-green-light-new-offshore-wind-developers-for-jersey-shore/72336656007/>

■ A January 24 press release from the **NJ Bureau of Public Utilities (NJBPU)** included statements about anticipated economic benefits, job growth and availability of more funds for environmental and conservations efforts within the state.

In the same press release, NJBPU weighed in on the **cost impact for residential customers**: “The total bill impact of the two projects for residential customers will be \$6.84 per month, beginning only once these offshore wind facilities are operational and delivering clean electricity to the New Jersey grid.”

Access the full press release from the NJBPU by clicking on this link

<https://www.nj.gov/bpu/newsroom/2023/approved/20240124.html#:~:text=Trenton,N.J.—The New Jersey,clean energy economy by 2035.>

■ **More about Leading Light Wind**, a partnership between Invenergy and energyRe.

- Invenergy is one of the largest private electricity investors based in Chicago. It has developed more than 30,000 megawatts (MW) of projects including wind, solar, gas-fired generation; it has also has developed transmission projects and battery storage projects.
- EnergyRe is based in New York City and focused on solving complex challenges and providing clean energy solutions. EnergyRe founding partners includes principals at the Related Companies, a large real estate developer.

Access information about this project’s partners by clicking on this link

<https://leadinglightwind.com/-projectPartners>

■ **More about Attentive Energy**, a partnership of TotalEnergies and Corio.

- TotalEnergies is the large French oil and gas giant with investments throughout the world including 13 gigawatts (GW) of off-shore wind projects.
- Corio is a portfolio company owned by Macquarie Asset Management a part of the Macquarie, the superannuation fund (pension fund) from Australia. Corio has over 30 GW of off-shore wind projects in operation, construction or development, making it one of the largest OSW companies in the world.

Access information about this project’s partners by clicking on this link

<https://attentiveenergy.com/attentive-energy-two/>

REPORT FROM THE NATIONAL ACADEMY OF SCIENCES AND A SUMMARY OF ITS KEY FINDINGS

■ At the request of the Bureau of Ocean Energy Management (BOEM), members of the National Academy of Sciences¹ evaluated how offshore wind farms in the Nantucket Shoals

¹ Click on the following link to access the website of the National Academy of Sciences:

<https://www.nasonline.org/>

region off the coast of Massachusetts² might affect **oceanic physical processes**, and, in turn, how those hydrodynamic alterations might affect local to regional ecosystems.

Of particular interest to BOEM are the potential effects of hydrodynamic changes on zooplankton productivity and other factors, which may affect foraging for the critically **endangered North Atlantic right whale**.

■ The report, prepared and distributed by the National Academy of Sciences (the Academy), was **released under the title** “ Potential Hydrodynamic Impacts of Offshore Wind Energy on Nantucket Shoals Regional Ecology: An Evaluation from Wind to Whales (2024).”

From the Executive Summary:

- “This report found the **impacts of offshore wind projects** on the North Atlantic right whale and the availability of their prey in the Nantucket Shoals region will likely be difficult to distinguish from the significant impacts of climate change and other influences on the ecosystem.
- **Further study and monitoring** of the oceanography and ecology of the Nantucket Shoals region is needed to fully understand the impact of future wind farms.”

Access the full National Academy of Sciences report by clicking on this link
<https://nap.nationalacademies.org/catalog/27154/potential-hydrodynamic-impacts-of-offshore-wind-energy-on-nantucket-shoals-regional-ecology>

■ In December 2023, as a follow-up, the University of South Carolina (USC) posted on its website an article that summarized the **key findings** of the Academy’s report. This follow-up article was prepared collaboratively by marine scientists at USC, Duke University, Old Dominion University and Rutgers University.³

From the USC summary report:

- “Regulators wanted to better understand how installing and operating offshore, fixed-bottom wind turbine generators would affect **physical oceanographic processes**, such as tides, waves and currents, and in turn how those changes could affect the ecosystem.

² Specifically, this area is where South Fork Wind, the first operational commercial wind farm in the U.S., is being constructed

³ **Erin Meyer-Gutbrod**, Assistant Professor, Earth, Ocean & Environment at USC; **Douglas Nowacek**, Randolph K. Repass and Sally-Christine Rodgers University Distinguished Professor of Conservation Technology in Environment and Engineering, Duke University; **Eileen Hofmann**, Professor, Center Coastal Physical Oceanography, Old Dominion University, Norfolk VA; and **Josh Kohut**, Professor Department of Marine & Coastal Sciences and co-founder of the Center for Ocean Observing Leadership, Rutgers University

- It's usually hard to figure out where whales are – they have a large habitat and spend most of their time below the surface of the water, where observers can't see them. Recently it's gotten even harder, because **climate change** is causing whales to shift where and when they feed. Currently, right whales are spending more time around the Nantucket Shoals region.
- **Right whales** are filter feeders that . . . need to find large, dense patches of zooplankton at appropriate water depths in order to feed. Altering waves, tides and currents in ways that affect where their prey are located could affect whale feeding or cause the whales to change foraging habitats.
- [The Academy] concluded that it is **critical to consistently monitor** right whales and their prey within and outside the region, because we don't know whether wind development will cause an increase, a decrease or no change to their zooplankton prey. Consistent monitoring will allow managers to mitigate potential negative impacts on the whales.
- There is a tremendous amount of both **natural and human-driven variability and change** in this region, including tides, seasonal changes in water temperature and long-term ocean warming driven by climate change.
- Researchers have tried to model the hydrodynamic impacts of turbines, but their results don't always agree with each other. **The most accurate outputs** will likely come from using a range of models . . . [starting with] models that predict what happens as water moves past a single turbine. These results then would inform models that predict the effects of an entire wind farm."

The four marine scientists who summarized the key findings in the Academy's report noted that in the report, federal regulators and other relevant organizations were advised to conduct observational and modeling research to better understand hydrodynamic and ecological processes before, during and after wind farm construction.

Access the full key results summary posted on the USC website by clicking on this link <https://sc.edu/uofsc/posts/2023/12/conversation-impact-of-wind-farm-on-right-whales.php>

THE ROUND-UPS

--- *This Offshore Wind Round-Up was prepared by a group of writers and researchers from Long Beach Island, New Jersey. The first Round-Up was published May 9, 2022; this issue is #21.*

--- *Round-Ups endeavor to periodically provide a **review of recent research efforts** in which the effects of offshore wind farms have been studied. In addition, they occasionally offer factual, **clarifying information**, in response to readers' questions and suggestions.*

■ Research included in Round-Ups points you in the direction of the science and assumes **no point of view** one way or the other about the presence of offshore wind farms off our shore. Likewise, clarifications are provided without editorial comment; they are there for you to consider so you can **draw your own conclusions**.

■ **Questions** about the content of Round-Ups and **suggestions** for future topics can be directed to RoundUpLBI@gmail.com. The Round-Up research and writing team welcomes questions and comments.

■ Round-Ups are **distributed** to the voting representatives of the eleven member organizations of the Joint Council of Taxpayers Associations of LBI (JCTA). Each taxpayer and property owner association then distributes this information to its members and the community via its regular communication methods, e.g., through newsletters; posted on websites; social media.

**Publication of the Offshore Wind Round Up
will take a pause in March 2024 and resume the following month**
