

The Offshore Wind Round-Up

Distributed through the JCTA
Issue #29 November 11, 2024

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 Project 1 to re-bid its contract. Details begin on this page.
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- The **Responsible Offshore Science Alliance** has announced that it is making available approximately \$3.4M to fund regional offshore wind fisheries research on the U.S. East Coast. Details begin *on page 8*.

REQUEST TO THE NJ BUREAU OF PUBLIC UTILITIES

On October 10, the Jersey Strong Coastal Coalition ("JSCC") announced that it had sent a letter earlier that week to the NJ Bureau of Public Utilities ("BPU") asking it to **reject a bid** from Atlantic Shores Offshore Wind for approval of a new contract for Atlantic Shores South Project 1.¹

The JSCC also acknowledged in the letter that as of that date, Atlantic Shores **had not requested** that the existing contract for Atlantic Shores South Project 1 be changed.

Per its **website**,² "Jersey Strong Coastal Coalition is a statewide alliance defending our economy and our ecosystem from fast-tracked, dangerous wind turbine farms."

Access the October 10 JSCC letter to the BPU by clicking on this link https://jerseystrong.org/wp-content/uploads/2024/10/JSCC-BPU-Letter.pdf

Background: In the second round of solicitation, the BPU awarded a contract to Atlantic Shores South Project 1 on June 30, 2021 for 1,510 megawatts of power.

¹ Atlantic Shores South is comprised of Project 1 and Project 2. Power from each area is awarded separately by the BPU as part of the BPU bidding solicitation process.

² https://jerseystrong.org/

What happens during those BPU solicitation periods? During these solicitations initiated by the BPU (there have been four so far), contractors bid for the opportunity to provide a specific amount of power at a specific cost. Power units are awarded as ORECS, which are Offshore Wind Renewable Energy Certificates, where one OREC equals one hour of electrical generation from a qualified offshore wind project.

What about the BPU award for Atlantic Shores South Project 2? When did that happen? It has not been awarded yet.

In January 2024, Atlantic Shores South Project 2 proposal was **rejected** in BPU's third round of solicitation. It is currently participating in the fourth round of solicitation and the award is scheduled to be announced sometime during the **fourth quarter of 2024**.

In an email sent to members of the NJ Senate and Assembly on the same day as its October 10th letter was released, the JSCC stated its conclusions about the impact of a new contract for ratepayers and suggested that NJ State laws would be violated, should the projects be allowed to move forward as planned. Further, the email to legislators includes the following:

"In the Offshore Wind Economic Development Act (OWEDA) the legislature set clear guardrails meant to protect ratepayers from unjust and unreasonable rates for offshore wind. As detailed in the attached documents, the BPU has smashed through these guardrails and set ratepayers and the entire NJ economy hurtling along a path into an economic ditch,"

Access the email to the NJ Senate & Assembly by clicking on this link https://jerseystrong.org/wp-content/uploads/2024/10/JSCC-Legislator-note.pdf

What is OWEDA? OWEDA is New Jersey's Offshore Wind Economic Development Act, signed into law by Governor Murphy in 2010. It establishes, but does not define, an offshore wind renewable energy certificate program, and authorizes the NJ Economic Development Authority to provide tax credits for qualified wind energy facilities in wind energy zones.

Access an explanation of OWEDA from the BPU website by clicking this link https://njcleanenergy.com/renewable-energy/programs/nj-offshore-wind/BOEM

Per the JSCC letter, what state laws are being violated? Unclear.

How BPU conducts itself is set forth in the New Jersey Administrative Code ("N.J.A.C.") 14:8-6.6.

Access N.J.A.C. 14:8-6.6 by clicking on this link

https://casetext.com/regulation/new-jersey-administrative-code/title-14-publicutilities/chapter-8-renewable-energy-and-energy-efficiency/subchapter-6-qualified-offshorewind-projects/section-148-66-funding-mechanism • **How did these regulations come to be?** An explanation of their evolution is included in the BPU's Order Opening for the Application Window of the Second Offshore Wind Solicitation, in which ASOW Project 1 participated:

"On February 19, 2019, after a notice and comment period, the Board adopted **new rules and amendments** to N.J.A.C. 14:8-6.6, establishing the OREC funding mechanism ("OREC Funding Mechanism Rules").

The OREC Funding Mechanism Rules set forth **the method and processes** by which ratepayers will fund an OSW project in accordance with all applicable laws, rules, and Board Orders, and how all revenues earned from an OSW project will be refunded and delivered to ratepayers.

The OREC Funding Mechanism Rules also **mandate** that the OREC price reflect the total capital and operating costs for an OSW project, offset by any State or Federal tax or production credits and any other subsidies or grants, as approved by the Board."

Access the full BPU Order Opening the Second Solicitation by clicking on this link https://www.nj.gov/bpu/pdf/boardorders/2020/20200909/8C - ORDER OSW 2nd Solicitation.pdf

• In the JCSS letter, it is stated that that regulated utilities are only allowed a 9% return on investment. Where can I find the regulation or law that states that? The Allowed Return on Equity for NJ electric utilities is 9.6%. The RU team searched regulatory filings and the utilities' website to confirm this Allowed ROE level.

A NOTE ABOUT WHAT IS REGULATED IN NJ: The transmission and delivery of electricity and natural gas are highly regulated in NJ, but the *generation* of electricity and the *production* of natural gas are NOT regulated.

For example, we all have NJ Natural Gas ("NJNG") as our gas company. NJNG buys the gas from a gas company and then delivers it to its customers. The rates for *delivery* of the gas by NJ Natural Gas are regulated, but no one ever asks, "How much did the XXX Gas Company [the company that supplies of the gas to NJNG] make on extracting the natural gas from the source and delivering it to NJNG?"

That latter transaction is *unregulated*, as are the companies that *generate* electricity and then sell it, such as offshore wind farms.

While there are certain rules and regulations around safety and environmental requirements, the amount of money a company can make on the *production* of electricity is not regulated.

How is the Return On Equity calculated? Note that *generators* of electricity, such as offshore wind farms, are unregulated so the process summarized below does not apply to them.

The Return On Equity ("ROE") fluctuates based on a variety of factors.

Typically, every three to five years, utilities file a rate case if they want to increase their earnings. Generally, a rate case sets the rates for customers so that the utility achieves a theoretical ROE.

After a rate case is filed by the utility, it is reviewed by the utility commission staff. After a bit of negotiation, the final version of the rate case is put to the utility commission for approval, which will be likely, given the support of the commission staff.

Every utility engages in this process and the ROE in any one year will differ from the previous year and the next year.

Enerdynamics³ provides an explanation on its blog Energy Currents about how regulators determine a utility's ROE:

https://www.enerdynamics.com/Energy-Currents_Blog/How-Regulators-Determine-a-Utilitys-Return-on-Equity-ROE.aspx

• Is there some sort of average for ROI/ROE for utilities? Yes, 9.6%.

Speaking to the NJ Senate Budget and Appropriations Committee in March 2023, Brian O. Lipman, Director Division of Rate Counsel of NJ, said that "Most investor-owned utilities earn 9.6% return on equities."

In fact, recent reporting confirms that the allowed ROE is 9.6% for Atlantic City Electric,⁴ PS&G,⁵ JCPL,⁶ and the Rockland Electric Company (part of ConEd).⁷

Access Mr. Lipman's full presentation to the Committee by clicking on this link https://www.nj.gov/rpa/docs/NJDRC Director Remarks to the Senate Budget & Appropriations
Committee on S3184 3-6-23.pdf

³ from the Enerdynamics website: "The energy education experts at Enerdynamics are here to serve and our list of satisfied Fortune 500 clients speaks for itself. We have the world's leading online power industry training courses . . ." Enerdynamics offers online learning, live seminars, books and an eLearning portal. https://www.enerdynamics.com/content/Why-Enerdynamics.aspx

⁴ https://www.exeloncorp.com/newsroom/Exelon-reports-fourth-quarter-and-full-year-2023-results-and-initiates-2024-financial-outlook

⁵ https://s24.q4cdn.com/601515617/files/doc_presentations/2024/11/PSEG-November-Investor-Update-Final.pdf Slide 32

⁶ https://s27.q4cdn.com/655807321/files/doc_downloads/2024/1-EEI-Financial-Conference 11-8-2024 FINAL.pdf Slide 11

⁷ https://nj.gov/bpu/pdf/boardorders/2024/20240724/2C ORDER RECO CIP.pdf

IMPACT ON CLIMATE CHANGE OF OFFSHORE WIND PROJECTS

A recent statement in a September 25th letter to the editor published in *The Sandpaper* prompted many to ask the same question.

In a reference to offshore wind projects off the Jersey shore, the letter's author wrote, "The federal impact statement from BOEM says that this project and others like it will have only a 'negligible' effect on climate change."

THE QUESTION: Is that statement true? Answer: No, it is not.

What the Final Environmental Impact Statement ("EIS") said was negligible is the impact offshore wind projects will have on specific aspects of the environment. The EIS was created and published by the Bureau of Ocean Energy Management ("BOEM"), a federal agency.

From page 3.3-2 of the EIS:

"The main body of this Final EIS identifies or describes in detail the impacts for resources of most concern, while **Appendix F**, *Assessment of Resources with Minor (or Lower) Impacts*, provides the analysis of other resources consisting of only **negligible to minor** Proposed Action Impacts."

From **Appendix F** of the Final EIS:

"F.1 Introduction

To focus on the impacts of most concern in the main body of this Final EIS, BOEM has included the analysis of resources with no greater than moderate adverse impacts below. These include air quality; water quality; bats; benthic resources; birds; coastal habitat and fauna; finfish; invertebrates, and essential fish habitat; sea turtles; wetlands; demographics, employment and economics; environmental justice; land use and coastal infrastructure; and recreation and tourism."

What the Final EIS said about climate change is that if the status quo is allowed to continue without a reduction in the emissions of greenhouse gases caused by the burning of fossil fuels, there would be serious consequences, specifically. . .

From the Final EIS, Impacts of Alternate A – No Action⁸

⁸ from the Final EIS Section ES.4.1 Alternative A – No Action: "Under the No Action Alternative, BOEM would not approve the COP [Atlantic Shores Construction and Operations Plan]. The Project's construction, installation, O&M [operation & maintenance] and eventual decommissioning would not occur. . . . The current resource conditions, trends and effects from on-going activities . . . serve as an existing baseline . . . "

"Global climate change is an **ongoing risk** for marine mammal species in the geographic analysis area. NMFS [National Marine Fisheries Service] list[s] the long-term changes in climate as a threat for almost all marine mammal species....

Climate change is known to increase temperatures, raise sea levels and alter ocean acidity. **Warming and sea level rise** could affect marine mammals through increased storm frequency and severity, altered precipitation patterns, altered habitat/ecology, altered migration patterns, increased disease incidence, and increased erosion and sediment deposition....

Increase in the **ocean's acidity** has numerous effects on ecosystems, including reducing available carbon that organisms use to build shells and causing a shift in food webs offshore.... This has the **potential to affect** the distribution and abundance of marine mammal prey.... For example, between 1982 and 2018, the average center of biomass for 140 marine fish and invertebrate species along U.S. coasts shifted approximately 20 miles north . . . and an average of 21 feet deeper....

The extent of these impacts is unknown, however, it is likely that marine mammal populations already stressed by other factors . . . will likely be the most affected by the **repercussions** on climate change." (page 3.5.6-16 & 17)

"Commercial and for-hire recreational fisheries would continue to be affected by ongoing environmental **trends**, particularly climate change." (page 3.6.1-52)

Access the Final EIS for Atlantic Shores by clicking on this link https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/AtlanticShoresSouth Vol 1 FEIS.pdf

Statements about climate change from BOEM include a **definition** of climate change and identification of the major **contributors** to it.

From Global Climate Change and the National Environmental Policy Act from BOEM's website:

"Climate change is broadly **defined** as the increase in global temperature and related chemical and physical changes resulting from the release of certain pollutants associated with anthropogenic activities.

Chief among the **drivers** of climate change are increasing atmospheric concentrations of carbon dioxide and other greenhouse gases such as methane, nitrous oxide and several fluorocarbons. These greenhouse gases change the atmosphere's chemical and physical properties altering temperature, humidity, wind, and precipitation patterns globally. These changes in turn affect the biological and human environment."

Access the full statement and a link to the most recent comprehensive report stating the scientific basis for climate change by clicking on this link

https://www.boem.gov/environment/environmental-assessment/global-climate-change-and-national-environmental-policy-act

DEBRIS CLEAN UP AT VINEYARDS WIND IN MASSACHUSETTS

Background. As of Monday June 24, 2024, Vineyard Wind, an offshore wind project off the coast of Massachusetts, had installed twenty offshore wind turbines and ten were operational, delivering 136 MW of power to the electric grid in Massachusetts. When completed, Vineyard Wind is expected to have a total of 62 offshore wind turbines.⁹

On Saturday July 13 at 7 pm, a 350' blade on one of the offshore wind turbines partially broke off about 65' feet from its base. Debris washed up on area beaches and sunk to the bottom of the ocean. A 500-foot safety area around the damaged turbine was set up immediately and by the following Tuesday, land clean-up had started.

On October 15, the Nantucket Current¹⁰ reported that retrieval of the debris from the ocean had begun. The work is being performed by a local salvage company.

From the article:

"During a previous survey by a sonar vessel in late August, GE Vernova [the manufacturer of the blade] discovered debris in 15 different locations on the sea floor within 150 meters [492 feet] of the turbine, according to Roger Martella, GE Vernova's chief sustainability officer and head of government affairs. The water depth around the turbine is approximately 150 feet.

"The debris the sonar has detected is not in any marine sensitive areas," Martella told the Select Board in September. "The plan is in October to go back and get it with a vessel and remove it from the sea floor and address the debris longer term."

Work on the Vineyard Wind project **has been suspended** since the blade failure on July 13. In August, Vineyard Wind was allowed to continue installing turbine towers and the mechanisms that holds the blades (nacelles), but the project is not allowed to produce power or install any more blades until the full suspension order is lifted.

⁹ https://www.vineyardoffshore.com/press-releases/vineyard-offshore-commissions-10-vineyard-wind-1-turbines-totaling-136-mw

¹⁰ from the website: "Nantucket Current is the island's leading online news source. We deliver the news, stories, and people of Nantucket, unbiased and unfiltered...Our mission is simple: to provide our readers with the latest news, stories, and information about the island in an unbiased and unfiltered manner."

From the article:

"The turbine blade failure at Vineyard Wind was blamed on a 'manufacturing deviation'
— specifically insufficient bonding of the blade materials — that occurred at the LM
Wind Power factory in Gaspé, Canada, the other location where the Haliade-X turbine
blades are manufactured."

The Nantucket Current report includes information about how the **salvage** is being conducted and the **re-inspection schedule** for all blades previously installed.

Access the full October 15 report by clicking on this link https://nantucketcurrent.com/news/vineyard-wind-begins-retrieval-of-blade-debris-from-sea-floor

ROSA ANNOUNCES REQUEST FOR PROPOSALS FOR \$3.4M IN RESEARCH FUNDING

The Responsible Offshore Science Alliance ("ROSA") has announced a Notice of Intent to issue an upcoming Request for Proposals ("RFP") to launch its Regional Research Program. The upcoming RFP will make approximately \$3,400,000 available for regional offshore wind fisheries research on the U.S. East Coast.

ROSA is offering funding for the following research areas: supporting fisheries access, understanding potential offshore wind impacts to larval fish and fisheries monitoring, including data integration, evaluation, & analysis.

From the Notice of Intent on the ROSA website:

"Through this RFP and selected projects from it, ROSA seeks to advance the methods and understanding of regional and cumulative effects of offshore wind on fish and fisheries and support meaningful solutions to the challenges surrounding responsible ocean co-use.

"Funds for research projects . . . are being provided by the Empire Wind 1 project, which is being developed by Equinor, LLC, as included in the New York State Energy Research and Development Authority (NYSERDA) New York 4 solicitation for awarded Offshore Wind Renewable Energy Certificates."

Access the full Notice of Intent and information about ROSA's Regional Research Program by clicking on this link https://www.rosascience.org/regional-rfp/

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 first appeared in May 2022 and it has been published every month except two since its debut.
- **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 <u>RoundUpLBI@gmail.com</u>. The Round-Up research and writing team welcomes questions and comments.
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