

### The Offshore Wind Round-Up

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#### **IN THIS ISSUE**

- Conclusions about the long-term cost of wind turbines and recommendations based on that analysis begin <u>on this page</u>.
- Updated information about the release of the FINAL Environmental Impact Statement for Atlantic Shores South begins on page 2.
- The release of the **DRAFT Environmental Impact Statement** for Atlantic Shores North and the beginning of the 45-day public comment period happened on March 18. More Information begins on page 3, including a link to the schedule of public meetings.
- ROSA (Responsible Ocean Science Alliance) has concluded its meetings with representatives from four sectors greatly impacted by offshore shore wind construction.
   A summary of those sessions and next steps begins on page 4.
- Atlantic Shores has recently applied to the NJ Department of Environmental Protection for permits to cover the building of land-based infrastructure projects. Details about what has been requested begin on page 5.
- A link to an announcement about new funding for studies focused on offshore wind's environmental impacts begins on page 7.

#### THE LONG-TERM COSTS OF WIND TURBINES

In an effort to understand the economic implications of wind farm maintenance and decommissioning, research teams collected accessible wind farm data and used it to estimate the total costs of maintenance and turbine end-of-life activities. Their results were published in the *Harvard Business Review* February 2024.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> The authors--

From "The Long-Term Costs of Wind Turbines": [They combined those calculations with] "engineering equations involving wind speed distribution, energy generation, and other relevant factors to build a 'lifetime value' model, which reveals the relationships between blade size, distance from shore, and turbine lifetime value (the total revenue generated from electricity produced by a turbine minus its total lifecycle cost)."

The article included an executive summary:

"Wind energy is experiencing a boom, but in a pattern eerily reminiscent of the nineteenth century Pennsylvania oil boom, wind farms are building ever larger turbines to farm wind energy further and further from shore. This trend carries risks, especially as turbines come with largely hidden costs.

Increasing evidence suggests that although larger turbines can capture more energy, at a certain point the costs of maintaining and decommissioning large turbines located far offshore will outweigh the benefits of that energy capture. If wind farm operators are to avoid creating an environmental and economic disaster in the longer term, they need to begin factoring realistic maintenance and decommissioning costs into their projections."

Statistics about the growth of the onshore and offshore wind industry were also included:

"In 2021, global wind capacity increased by 94 GW (gigawatts), primarily led by six countries: the United States, China, Germany, India, Spain, and Brazil.

This growth in wind power has been accompanied by dramatic cost reductions, making wind energy increasingly competitive. Onshore wind energy costs fell by 68% and offshore by 59%, with 2021 seeing further declines of 15% and 13%, respectively.

Over the decade from 2010 to 2021, onshore wind capacity increased four-fold, while offshore capacity grew 11-fold."

Access the full article in the Harvard Business Review by clicking on the link <a href="https://hbr.org/2024/02/the-long-term-costs-of-wind-turbines">https://hbr.org/2024/02/the-long-term-costs-of-wind-turbines</a>

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

- Atlantic Shores Offshore Wind (ASOW) includes two wind farm projects:
  - Atlantic Shores South, whose development has been on-going, covers approximately
     102,000 acres in the southern portion of the total area of 183,000+ acres leased to

(continued from the previous page) **Luk N. Van Wassenhove** is the Henry Ford Chaired Professor of Manufacturing, Emeritus, at INSEAD and leads its Humanitarian Research Group and its Sustainable Operations Initiative.

- Atlantic Shores Offshore Wind. It has been designated Lease Area OCS-A 0499 by the Bureau of Ocean Energy Management (BOEM).
- Atlantic Shores North, the portion of the leased area closest to LBI, is the remaining 81,129 acres in the northern portion of the leased area. It has been designated Lease Area OCS-A 0549 by BOEM.
- May 31, 2024 is now the target date for the publication of the official notice of availability for the final Environmental Impact Statement ("EIS") in the Federal Register for Atlantic Shores South. That date would also be the beginning of the public review period, which extends for a minimum of 30 days.
- **The Permitting Dashboard,** an official website of the U.S. government, is the source for all updates regarding this project.

*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

**July 1, 2024** is the target date listed for the issuance of the final EIS for Atlantic Shores South, presuming a May 31, 2024 release date.

Access details about the full EIS review process from the website of the U.S. Environmental Protection Agency by clicking on this link <a href="https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-policy-act-review-process-">https://www.epa.gov/nepa/national-environmental-environmental-environmental-environmental-environmental-environmental-environmental-environmental-environmental-environmental-environmental-environmental-environmental-environmental-

# PUBLIC COMMENT PERIOD BEGINS FOR ATLANTIC SHORES NORTH DRAFT ENVIRONMENTAL IMPACT STATEMENT

- **Atlantic Shores Offshore Wind (ASOW)** includes two wind farm projects (*this section is a duplicate of the explanation above*):
  - Atlantic Shores South, whose development has been on-going, covers approximately 102,000 acres in the southern portion of the total area of 183,000+ acres leased to Atlantic Shores Offshore Wind. It has been designated Lease Area OCS-A 0499 by the Bureau of Ocean Energy Management (BOEM).
  - Atlantic Shores North, the portion of the leased area closest to LBI, is the remaining 81,129 acres in the northern portion of the leased area. It has been designated Lease Area OCS-A 0549 by BOEM.
- The process to prepare the **Environmental Impact Statement for Atlantic Shores North** has begun:

- On March 18, 2024, BOEM published a Notice of Intent to prepare an Environmental Impact Statement (EIS) for Atlantic Shores North.
- Publishing that notice kicks off the public scoping process, which means the public has
   45 days from that date (through May 2) to communicate with BOEM about concerns
   and issues related to the construction and operation of Atlantic Shores North.
- During the public comment period, BOEM will host two virtual and three in-person scoping meetings where the public can learn more about project, ask questions of BOEM experts, and provide oral comment.

The full schedules for these virtual and in-person April meetings are contained in the BOEM announcement, which can be viewed by clicking on this link

https://www.boem.gov/renewable-energy/state-activities/new-jersey/atlantic-shores-north-ocs-0549

I can't attend any of those meetings. How do I make my opinions known to BOEM? Click on the link below to access the announcement published in the Federal Register on March 18.

 $\frac{https://www.federalregister.gov/documents/2024/03/18/2024-05649/notice-of-intent-to-prepare-an-environmental-impact-statement-for-the-proposed-atlantic-shores-north$ 

Next, scroll down to the section titled Addresses, which includes the address to where you may send your written comments using the USPS or another delivery service. You may also send your comments online through the regulations.gov web portal and the directions for how to do that are there as well.

- **What happens when the public comment period is over?** From the BOEM announcement above:
  - "Following the comment period, BOEM will develop a scoping report using the comments received during the public scoping process to help identify important resources and issues, impact-producing factors, reasonable alternatives for consideration, and potential mitigating measures that should be analyzed in the ASOW North draft EIS.
  - Following the conclusion of the scoping period and development of the scoping report,
     BOEM, in coordination with our cooperating agencies, will begin the development of
     the Draft EIS.
  - Once the Draft EIS has been completed, a Notice of Availability will be posted in the Federal Register announcing the public review and comment period."

### RESPONSIBLE OFFSHORE SCIENCE ALLIANCE (ROSA)

On February 27, ROSA's Executive Director Renée Reilly announced the following in the monthly newsletter to subscribers: "Over the past several months, ROSA has met with each of

**the four sectors** (fisheries, offshore wind, science and research and regulatory) as part of our monitoring plan coordination sessions."

Highlights from the accompanying article about this effort:

"These sessions provided a forum for ROSA to **hear directly from each sector** about concerns, lessons learned, and paths forward for increasing consistency and collaboration in the offshore wind fisheries monitoring space."

"All four sessions were well-attended and produced meaningful conversations around how to best coordinate fisheries monitoring plans. **Key challenges** were identified, along with actions that ROSA can take to support future collaborative solutions."

"Next, ROSA will develop a draft report, which will be **presented in a panel discussion** to all sectors this summer.<sup>2</sup> Following the cross-sector panel discussion, and review by ROSA's Research Advisors, a **final report will be released**. This report will inform ROSA's current strategic planning process. Future sessions are being developed based upon feedback from the inaugural series."

### **What is ROSA and what does it do?** From its website:

"The Responsible Offshore Science Alliance (ROSA) is a nonprofit organization that advances research, monitoring, and methods on the effects of offshore wind energy development on fisheries across US federal and state waters.

We serve as an objective resource for all sectors and facilitate the coordination of regional scientific research to collaboratively and efficiently deepen understanding.

ROSA's work currently focuses on the waters from Maine to North Carolina."

Access ROSA's website by clicking on this link https://www.rosascience.org/

## NOTICE OF RECEIPT OF APPLICATIONS FOR OFFSHORE DEVELOPMENT FROM THE NJ DEP

	What happened? On March 6, the NJDEP sent an advisory email to subscribers who had
pı	reviously signed up to receive these types of emails.

What did this advisory email say? It announced that the NJDEP had received four applications from Atlantic Shores Offshore Wind 1 & 2, part of Atlantic Shores South:

<sup>&</sup>lt;sup>2</sup> The date of that panel discussion had not been announced when this Round Up was published.

- 1. For the three separate permits (one being a CAFRA<sup>3</sup> permit) for the proposed construction of the **nearshore and onshore components** associated with the development of the Atlantic Shores Offshore Wind Project 1. The application also requests confirmation that the proposed offshore wind farm meets some specific requirements in another pending application.
- For a Waterfront Development In-water Individual Permit from Atlantic Shores Offshore
  Wind Project 2, LLC for the proposed installation of the portion of the electric
  transmission export cable within New Jersey State waters within the Atlantic Ocean off
  the coast of the Borough of Sea Girt in Monmouth County.
  - The HVDC export cable bundle consists of two HVDC cables and one fiber optic cable and is intended to transmit electric generated from proposed the Atlantic Shores Offshore Wind Project 2 within BOEM Lease Area OCS-A 0499 to New Jersey (Atlantic Shores South).
- 3. For two separate permits (one being the same as #2 above and the other a CAFRA permit) for the proposed construction of an operations and maintenance facility in Atlantic City on Block 567, Lot 2. The project consists of the construction of a warehouse, office, parking, cranes, and docks for boat mooring, which will provide support services for commercial-scale, offshore wind energy facilities within the proposed offshore wind farm.
- 4. For three separate permits (one being a CAFRA permit) for the **proposed construction** of a new bulkhead in Atlantic City on Block 567, Lot 2.

The bulkhead is associated with a future proposed operations and maintenance facility at this site, which will provide support services for commercial-scale, offshore wind energy facilities within the proposed offshore wind farm.

How can I review these applications myself? The applications can be reviewed by appointment at the Department's Trenton Office. It might be easier, however, to request an electronic copy of the applications through the NJDEP website as part of an OPRA<sup>4</sup> request that you would submit to the NJDEP.

If you want to go that route, click on this link and follow the directions on the subsequent screens <a href="https://www.nj.gov/dep/opra/opraform.html">https://www.nj.gov/dep/opra/opraform.html</a>

Is there other project information available to review on the NJDEP website? Yes. Click on this link www.nj.gov/dep/offshorewind/outreach.html#comment

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<sup>&</sup>lt;sup>3</sup> CAFRA is the Coastal Areas Facility Review Act that regulates the use, development and protection of New Jersey's coastal resources and issues coastal permits.

<sup>&</sup>lt;sup>4</sup> OPRA is Options Price Reporting Authority

Note that the NJDEP welcomes comments and any information that you may provide concerning the proposed projects. Submit written comments electronically through the website at <a href="www.nj.gov/dep/offshorewind/comments.html">www.nj.gov/dep/offshorewind/comments.html</a> or in writing to the New Jersey Department of Environmental Protection, Division of Land Resource Protection, P.O. Box 420, Code 501-02A, Trenton, New Jersey 08625, Attn: Janet Stewart, Bureau Chief.

# FUNDING PLEDGED FOR ENVIRONMENTAL IMPACT STUDIES BY THE STATE OF NEW JERSY

On March 26, the *Asbury Park Press* reported that officials from the NJ Department of Environmental Protections and the NJ Board of Public Utilities had jointly announced funding of \$3.7M "for scientific research and monitoring of the environmental impacts of offshore wind energy off the Jersey Shore." The award will fund the Offshore Wind Research & Monitoring Initiative.

From the article: "The initiative supports projects that will document the distribution of whales, dolphins and seals and the turbines' impact on the animals; study fish and crustaceans off the Jersey Shore; and study the populations and impacts on endangered shorebirds, such as the red knot, piping plover and roseate tern."

Access the full article by clicking on this link https://www.app.com/story/news/local/land-environment

#### 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 May 9, 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 **suggestion**s for future topics can be directed to <u>RoundUpLBI@gmail.com</u>. 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.