

# The Offshore Wind Farm Round-Up

Created by the JCTA

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# PUBLIC COMMENT PERIOD FOR ATLANTIC SHORE'S REQUEST FOR FEDERAL CONSISTENCY CERTIFICATION

What is Federal Consistency Certification?

From the website of the Office of Coastal Management, part of the National Oceanic and Atmospheric Administration ("NOAA"): "Section 307 of the 'Coastal Zone Management Act of 1972' (CZMA), called the 'federal consistency' provision, gives states a strong voice in federal agency decision making, which they otherwise would not have, for activities that may affect a state's coastal uses or resources. [It is] a powerful tool that state programs use to manage coastal activities and resources and to facilitate cooperation and coordination with federal agencies."

Access Section 307 of the Coastal Zone Management Act of 1972 by clicking on this link https://coast.noaa.gov/czm/act/sections/ - 307

### What does Federal Consistency Certification actually certify?

*From the same website as above*: "Generally, federal consistency requires that federal actions, within and outside the coastal zone, which have reasonably foreseeable effects on any coastal use (land or water) or natural resource of the coastal zone be consistent with the enforceable policies of a state's federally approved coastal management program."

Access the entire Federal Consistency section from the website of NOAA's Office of Coastal Management by clicking on this link <u>https://coast.noaa.gov/czm/consistency/</u>

Wasn't there a previous public comment period? Is this an additional opportunity?

Yes, and yes

According to the website of the NJ Department of Environmental Protection ("DEP"):

"Atlantic Shores Federal Consistency Certification Request: DEP is holding a third comment period on this pending request from September 20 through October 19, 2023, due to an inadvertent omission of notice of the prior comment periods from the GovDelivery service."

More detailed information was provided in the September 20, 2023 email sent to all citizens who had previously signed up to receive these emailed announcements from the DEP:

"The DEP held an initial public comment period upon submission of the Federal Consistency Certification request, from October 20, 2021 to December 18, 2021. Upon publication of the Draft Environmental Impact Statement ("DEIS") by BOEM, DEP held a second public comment period from June 1, 2023 through June 30, 2023. Because DEP inadvertently omitted notice of the comment periods from the GovDelivery service, an additional opportunity to comment is being provided from September 20 through October 19, 2023."

Through what date does this current public comment period run?

October 19, 2023

Comments may be submitted on the DEP's offshore wind website by clicking on the link below. Under the "Choose Application" drop down, select "Atlantic Shores Offshore Wind Federal Consistency Certification."

https://dep.nj.gov/offshorewind/comments/

Address your FOMO<sup>1</sup> by clicking on the link below to sign up for the DEP's email announcements, if you have not already done so.

https://public.govdelivery.com/accounts/NJDEP/subscribers/new?preferences=true

### LINKS TO VISUAL SIMULATIONS

In connection with the August 30<sup>th</sup> Sandpaper article (the link to *The Sandpaper* article "New Rendering Brings Turbine Visibility Into Focus" is included at the end of this section),

<sup>1</sup> Fear Of Missing Out

many requested that we publish the link to the video presentation mentioned by Atlantic Shores in its follow-up letter to The Sandpaper's editor in the September 6 issue. As several noted, it really is "easier to click on a link than to type in all those letters and numbers."

*Here is the link to that video presentation:* <u>https://vimeo.com/575831732/66cdd513d2</u>

This 11-minute video explains how Atlantic Shores produced the simulations that show what the wind turbines will look like from different points on the shore and in different atmospheric conditions. After some introductory information, a statement about the dimensions of the offshore wind turbines begins around minute 1 and 49 seconds and an explanation about the visual assessment process itself begins around minute 2 and 38 seconds. The section starting around minute 4 and 18 seconds explains how the simulations were created and shows the results.

The full August 30<sup>th</sup> article on page 24 of *The Sandpaper* to which Atlantic Shores was responding can be accessed by clicking on this link:

### https://www.thesandpaper.net/articles/lbt-officials-develop-new-rendering-showingmore-turbine-visibility/

In addition, the article's accompanying photograph, originally displayed on page 24 above the article's headline and filling about 25% that page, was enlarged so that the photograph was spread over the entirety of the previous two pages. No online link to this enlarged image appeared as a result of the search of *The Sandpaper*'s website and archives, but if you have access to a print version of the August 30th issue, you will find it spread across pages 22 & 23.

#### UPGRADING ELECTRICAL TRANSMISSION CAPACITY

An article from NPR published August 31, 2023 with the headline "Why lasers could help make the electric grid greener" identifies the problem:

"The climate crisis demands replacing fossil fuels with green energy quickly, but thousands of wind and solar projects are looking at several-year wait times to get connected to transmission lines. To reach the country's goals to sharply cut planet-warming pollution, the U.S. needs to expand transmission capacity by 43% by 2035,

according to the REPEAT Project led by Princeton University.<sup>2</sup> But building those new transmission lines will take time, and billions of dollars."

#### The same article identifies solutions:

"Experts say innovations called 'grid enhancing technologies' or 'advanced transmission technologies' can help speed up the renewable transition by making the existing grid and new transmission lines work more efficiently. . . . These innovations include wires that carry more electricity, software and hardware that can help utilities avoid congestion on lines, and laser sensors . . ."

### In the same article, the function of sensors is explained:

"At any given moment, utilities typically know how much power is going through their lines. But they aren't required to know the real time conditions of those lines, like the wind speed or how hot the line is. Without that data, utilities have to use conservative standards for how much power can safely flow . . .

[When] sensors gather information from the wires — about wind, temperature, and wire sag — that data allows utilities to go beyond their conservative standards and safely put more electricity through the wires. ... With this tech, called 'dynamic line rating', utilities are able to increase the efficiency of their lines ...."

Access the full article by clicking on the link

## https://www.npr.org/2023/08/13/1187620367/power-grid-enhancing-technologiesclimate-change

### **QUESTIONS ABOUT MID-ATLANTIC CLOSURE & SCALLOPS**

Many people had the same questions about comments made at the August 27 Save LBI meeting in Barnegat Light.

<sup>&</sup>lt;sup>2</sup> *From its website*: "The Repeat Project provides regular, timely and independent environmental and economic evaluation of federal energy and climate policies as they're proposed and enacted, offering a detailed look at the United States' evolving energy and climate policy environment and the country's progress on the path to net-zero greenhouse gas emissions.

<sup>[</sup>Its goal is to] provide independent, timely, and credible information and analysis for broad educational purposes, including as a resource available publicly for stakeholders, decision-makers, and the media. <u>https://repeatproject.org/</u>

Funding for the REPEAT Project was provided by a grant from the Hewlett Foundation." <a href="https://hewlett.org/about-us/">https://hewlett.org/about-us/</a>

*What is the Mid-Atlantic Closure and why did the scallop industry shutter that area two years ago?* 

The area being referred to is the Mid-Atlantic Scallop Access Area. The scallop industry did not shutter (close) it because the scallop industry does not have the power to do so. The National Oceanic and Atmospheric Administration ("NOAA") has the exclusive authority to close this area and has done so in 6 out of the past 8 years.

The last time NOAA closed the area was October 7, 2021 for the remainder of the fishing year, which ended March 31, 2022. The area remained closed for just under 6 months, reopening on April 1, 2022, the first day of the 2022 fishing year, and it has remained open ever since.

NOAA takes this closure action to prevent overfishing in the area, based on the calculated fishing mortality rate. When the scallop fishing fleet exceeds the total number of trips into the area that have been allotted for that year, the area is closed for the remainder of the fishing year.

The number of allotted fishing trips varies from year to year. In the six years in which the area has been closed to prevent overfishing, the number of annual trips allotted to the fleet ranged from a high of 2,068 to a low of 571.

Access NOAA's closure decree on October 7, 2021 published in the Federal Registry by clicking on this link https://www.federalregister.gov/documents/2021/10/12/2021-22139/fisheries-of-thenortheastern-united-states-atlantic-sea-scallop-fishery-closure-of-the-mid-atlantic

*Where is this area*? The Mid-Atlantic Scallop Access Area is shown in the graphic below.



The graphic on the previous page is from a press release posted on NOAA's website announcing the closure of this area effective July 19, 2020 – March 31, 2021.

#### Click on the link below to access the full press release

https://www.fisheries.noaa.gov/bulletin/atlantic-sea-scallop-fishery-2020-closure-midatlantic-access-area-limited-access

#### Why aren't the scallops doing well in that area?

*From* "Effects of warming and fishing on Atlantic sea scallop (*Placopecten magellanicus*) size structure in the Mid-Atlantic rotationally closed areas" published in the *ICES Journal of Marine Science* April 17, 2023<sup>3</sup>

*From the Abstract:* "The results suggested that the interannual<sup>4</sup> variances in sea scallop size structures were associated more with thermal stress in regions shallower than 60 meters but more with fishing mortality in regions deeper than 60 meters.

The percentages of small (large) size groups increased (decreased) with elevated thermal stress and fishing pressure. We adopted a scope for growth model to build a mechanistic link between temperature and sea scallop size.

Model results suggested a gradual decrease in maximum shell height and habitat contraction under warming.

*From the Introduction*: "Commercial fishing activities mainly target large individuals, thus truncating the age structure by removing large-size groups and increasing the relative abundance of small-size classes.

Overfishing has been associated with a relatively low abundance of large individuals over the Northeast U.S. Shelf fishing grounds from the 1970s through the mid-1990s ... The size of sea scallops increased in most rotationally closed areas after implementing a series of fishery management regulations.

Noticeably, fishing mortality reduction did not successfully rebuild the sea scallop population in all closed areas. . . . The closure of Delmarva in the southern Mid-Atlantic Bight starting from 2012 resulted in relatively high recruitment with low spawning stock biomass, indicating a decrease in sea scallop mean size. . . . The scallop size did not increase in response to the reduction in fishing pressure,

<sup>&</sup>lt;sup>3</sup> Authors: Z Zang and R Ji at the Department of Biology, Woods Hole Oceanographic Institution, Woods Hole MA; D R Hart at NOAA Northeast Fisheries Science Center, Woods Hole MA; D Jin at the Marine Policy Center, Woods Hole Oceanographic Institution, Woods Hole MA; C Chen, School for Marine Science and Technology, University of Massachusetts Dartmouth in New Bedford MA; Y Liu College of Marine Science, University of South Florida, St. Petersburg FL; C S Davis Department of Biology, Woods Hole Oceanographic Institution, Woods Hole MA

<sup>&</sup>lt;sup>4</sup> Occurring between, relating to, or involving two or more years

implying that other stressors may play a vital role in limiting the recovery of sea scallop size structure after fishery closure.

Several previous studies suggested that warming might be responsible for the absence of large individuals in the southern Mid-Atlantic Bight . . .

Both lab experiments and model results indicated that the vulnerability of Atlantic sea scallop and other bivalve species to thermal stress increases with individual size. . . . for large individuals, [a combination of small gill surface area and body weight] can induce [responses that result] . . . in lower tolerance to warming and higher mortality than small individuals . . .

Given the rapid temperature increase . . . in the Mid-Atlantic Bight over the last several decades and projected future warming . . ., understanding the effects of thermal stress on the variability of population size structure is imperative for developing climate adaptive fishery management options."

*From Discussion: Effects of multiple stressors on sea scallop size structure*: "The fishing location comparison between 2006 and 2017 suggests that the primary fishing grounds shifted offshore in recent years probably due to the decreased abundance of large scallops in shallow waters.

Moreover, discard mortality associated with fishing activities might also contribute to the variation of sea scallop size structure. Discard mortality is the probability of a discarded sea scallop not surviving during harvest or shortly after release due to physical trauma, physiological pressure, and predation.

Although few previous studies investigated the role of discarding in modulating sea scallop size structure, the responses of different size groups to these stressors vary greatly, which might give rise to size structure shifts.

Additionally, the occurrence of discarding is a function of size structure because small scallops with lower commercial values are more likely to be discarded ... Thus, fishing can profoundly affect sea scallop size structure through direct harvesting and indirect discard mortality."

Access the full study by clicking on this link https://academic.oup.com/icesjms/article/80/5/1351/7125901

This Offshore Wind Farm Round-Up was prepared by a group of writers and researchers from Long Beach Island, New Jersey.

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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