

The Offshore Wind Round-Up

Distributed through the JCTA Issue #32 February 10, 2025

IN THIS ISSUE

- The focus on offshore wind projects by the new administration has been very much in the news recently. Brief recaps of the Presidential Memorandum and subsequent developments begin <u>on this page</u>.
- A recent press release from Save LBI that summarized conclusions of noise studies and described a recent legal action has generated questions. Answers begin <u>on page 5</u>.

This issue of the Offshore Wind Round-Up is the last one.

Thank you for reading our newsletters and for all your good questions and thoughtful comments over the past three years.

Sincerely, The Research & Writing Team of the Offshore Wind Round-Ups

THE PRESIDENTIAL MEMORANDUM REGARDING OFFSHORE WIND

On January 20, President Trump signed a Presidential Memorandum ("Memorandum") titled "Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects."

Access the full Memorandum by clicking on this link <u>https://www.whitehouse.gov/presidential-actions/2025/01/temporary-withdrawal-of-all-areas-on-the-outer-</u> <u>continental-shelf-from-offshore-wind-leasing-and-review-of-the-federal-governments-leasing-and-</u> <u>permitting-practices-for-wind-projects/</u> **The summary of key points** below, condensed from the Linklaters¹ Topics Hub on its website, provides information compatible with reporting from many other credible sources.

• For projects attempting to secure a new lease: The Memorandum pauses all new and renewed wind energy leasing until the Memorandum is revoked.

Also, with the temporary withdrawal of the Outer Continental Shelf ("OCS") for wind leasing, the Bureau of Energy Management ("BOEM") will not be conducting any competitive auctions for *new* wind leases within that area while the Memorandum is in effect.

 For projects with existing wind energy leases that do not have an approved Construction and Operations Plan ("COP"), which includes Atlantic Shores South Project 2, Atlantic Shores North & Atlantic Shores Bight:

The Secretary of the Interior is directed to analyze whether there is reason and legal basis for terminating or modifying existing leases.

The Memorandum does not prevent BOEM from continuing to conduct the environmental reviews for COPs that have been submitted for offshore wind projects. Whether BOEM issues COP approvals while the Memorandum is in place, however, will depend on the timing and outcome of the required assessment for that specific project.

Once political appointees are in place, BOEM is expected to issue guidance on implementation of the Memorandum.

• For projects with existing wind energy leases and COP approvals from **BOEM**, which includes Atlantic Shores South Project 1:

The Secretary of the Interior is directed to analyze whether there is reason and legal basis for terminating or modifying the underlying leases.

The Memorandum does not call on BOEM to rescind or amend previously issued COP approvals for offshore wind projects, nor does it call for a freeze on projects that are already under construction.

Access the full Linklater report by clicking on this link

https://www.linklaters.com/en/knowledge/publications/alerts-newsletters-and-guides/2025/january/22/uspresidential-memorandum-directed-at-onshore-and-offshore-wind-projects

¹ Linklaters is an international law firm, founded in 1838, with offices in Africa, the Americas, Asia Pacific, Europe and the Middle East <u>https://www.linklaters.com/en/about-us/history</u>

A January 31 article originally published by Grist² under the headline "What Trump's Executive Action Could Do To Offshore Wind" **summarizes the possible legal response** options to the presidential memo.

Access the full Grist article from NJ Spotlight News by clicking on this link https://www.njspotlightnews.org/2025/01/how-trumps-executive-action-could-affect-offshore-winddevelopment

Citing a Bloomberg report as its source, on January 30 Patch reported that **Shell had** withdrawn from the Atlantic Shores Offshore Wind ("ASOW") project.

Atlantic Shores has been a joint partnership between Shell New Energies US LLC and EDF Renewables North America.

From Bloomberg reporting published January 30 under the headline Shell Takes \$1B Hit on Wind Farm Trump Wants 'Dead':

"In its quarterly earnings on Thursday, Shell disclosed a \$996 million impairment related to an offshore wind farm known as Atlantic Shores.

"We just don't see that it fits both our capabilities nor the returns that we would like," [Shell] Chief Financial Officer Sinead Gorman said on a call with reporters. "So we took the decision to effectively **write that off and pause our involvement**."

From Patch reporting:

"An Atlantic Shores spokesperson told Patch the company remains "committed to New Jersey and delivering the Garden State's first offshore wind project."

"Business plans, projects, portfolio projections and scopes evolve over time – and as expected for large, capital-intensive infrastructure projects like ours, our shareholders have always prepared long-term strategies that contemplate multiple scenarios that enable Atlantic Shores to reach its full potential," the spokesperson said.

Access the full article from Patch by clicking this link <u>https://patch.com/new-jersey/barnegat-manahawkin/s/j4r0w/shell-withdraws-from-atlantic-shores-offshore-wind-project-report</u>

Access to the full Bloomberg article requires a subscription, but if you click on the Bloomberg report link in the Patch article, you can activate a one-article-only viewing feature.

² *From its website*: "Grist is a nonprofit, independent media organization dedicated to reporting on climate change." <u>https://grist.org/about/</u>

On February 3, numerous news sources reported that the New Jersey Bureau of Public Utilities ("BPU") will **not be going forward with its fourth offshore wind solicitation**.

An article published February 3 in The Philadelphia Inquirer explains:

"What did the BPU do?

The BPU **did not cancel the Atlantic Shores project** outright but made it difficult for it to proceed.

The BPU has gone through **four rounds** of what it calls wind solicitations — proposals by wind energy developers to build projects that would meet state-specified capacities.

The BPU had awarded Atlantic Shores wind solicitations for two wind farms, known as Atlantic Shores 1 and 2, in prior wind solicitations.

Last year, the board **opened a fourth round of wind solicitations** that came during a financially shaky time for the industry ...

On Monday, the **BPU canceled the fourth round** that Atlantic Shores was counting on ...

However, [Atlantic Shores] noted Monday that it **still has an agreement** with the BPU in place for Atlantic Shores that grants valuable Offshore Wind Renewable Energy Certificates (ORECs)."

Access the full article from The Philadelphia Inquirer by clicking on this link https://www.inquirer.com/news/new-jersey/offshore-wind-nj-renewable-energy

BPU issued its own press release about the cancellation of the fourth offshore wind solicitation on February 3.

Access BPU's entire statement by clicking on this link https://www.nj.gov/bpu/newsroom/2024/approved/20250203.html

In addition, on February 3, *NJ Spotlight News* reported that the NJ Economic Development Authority will be **reviewing options and alternatives** for the New Jersey Wind Port in Salem County, citing recent developments at the federal level and announcements from offshore wind developers as the reasons.

From the New Jersey Wind Port website: "The **New Jersey Wind Port** (NJWP) is the nation's first greenfield port designed, built and operated exclusively to support offshore wind projects.³

Access the full NJ Spotlight New article by clicking on this link https://www.njspotlightnews.org/video/offshore-wind-on-the-brink

QUESTIONS ABOUT A RECENT PRESS RELEASE FROM SAVE LBI

On January 7, 2025, Save LBI issued a press release that resulted in many questions.

In this press release, it was reported that Save LBI had commissioned studies to determine the impact of above-ground noise generated by the offshore wind project and summarized some of the studies' conclusions. In addition, it mentioned a lawsuit filed by Save LBI against several federal agencies and Atlantic Shores Offshore Wind.

Access the full press release by clicking on this link <u>https://www.savelbi.org/_files/ugd/a85a2b_a72655954689481d94be010438c62f39.pdf</u>

Is Atlantic Shores asking the New Jersey Bureau of Public Utilities ("BPU") for additional tax subsidies? No. Atlantic Shores is asking the BPU for a price increase, not a tax subsidy.

An article in the Asbury Park Press published July 11, 2024 reported that Atlantic Shores Offshore Wind **resubmitted a proposal** to build two adjacent energy projects that would generate 2,800 megawatts of electricity for New Jersey customers. These two projects are Atlantic Shores Project 1 and Project 2.

Atlantic Shores is looking for an **increase in the OREC price** that was originally awarded by the BPU in 2021 for these two projects. ORECs are <u>O</u>ffshore Wind <u>R</u>enewable <u>Energy</u> <u>C</u>ertificates. Offshore developers earn one OREC for each megawatt-hour of electricity produced through wind turbines.

From the Asbury Park Press July 2024:

"In 2021, Atlantic Shores was awarded an OREC **price beginning at \$86.62** per megawatt-hour in year one of its 20-year contract, increasing 2.5% annually, according to Board of Public Utilities documents.

For comparison, Attentive Energy Two [42 miles east of Seaside Heights NJ] agreed this year to an OREC **price of \$131** per megawatt hour in the first year of the project with 3% each year afterward. Leading Light Wind [40 miles east of

³ <u>https://njwindport.njeda.gov/</u>

Atlantic City] will receive an OREC **price of \$112.50** per megawatt hour in year one, then 2.5% increase each year following."

Access the full Asbury Park Press article by clicking on this link https://www.app.com/story/news/local/land-environment/2024/07/11/atlantic-shores-offshore-wind-newjersey-power-plan-energy/74364986007/

Is it true that the Atlantic Shores offshore wind project will be situated closer to a shore community than anywhere else in the world? No. The Block Island offshore wind farm is located approximately 3.8 miles southeast of Block Island RI.

From the Providence Warwick Convention & Visitors Bureau.⁴

"Block Island [is] an 11-square-mile seaside resort located 12 miles off the Rhode Island coast.... The island's 17 miles of pristine, free public beaches are the main attraction of this tiny island, whose people are strongly devoted to preserving the ecology of their home. Block Island conservation groups operate a large trail system on the island, offering walking and hiking paths through grassy meadows, quiet woods and along the sandy shore."

In addition, there are multiple offshore wind projects in the Baltic Sea and the North Sea that are closer to shore than the Atlantic Shores project:

- Baltic Sea has 14 offshore wind projects operating closer than 8.7 miles (14 km)
 offshore https://en.wikipedia.org/wiki/List_of_offshore_wind_farms_in_the_Baltic_Sea
- North Sea has12 offshore wind projects operating closer than 8.7 miles (14 km) offshore <u>https://en.wikipedia.org/wiki/List of offshore wind farms in the North Sea</u>

Is it true that ASOW has done no noise shore & inland impact analysis? No and yes, in some aspects.

Appendix II-U in the Construction and Operations Plan for Atlantic Shores South is the Offshore Noise Report.

Its analysis, however, focused on "baseline sound monitoring program that measured existing ambient **sound levels** in the vicinity of the **proposed onshore substation and/or converter station**, computer modeling that predicted future sound levels when the onshore substation and/or converter station is operational, computer modeling of construction noise, and a comparison of predicted sound levels with applicable noise criteria."

Section 9.0 of this appendix is titled "Onshore Noise From Offshore Activities" (page 8-13). It mentions noise made by wind turbines ("50 dB at 1,000 feet"); there is no mention anywhere in this document of a study of **noise impact from pile drivers**, one of the allegations in the Save LBI lawsuit filed in January.

⁴ <u>https://www.goprovidence.com/things-to-do/explore-rhode-island/block-island/</u>

Access Appendix II-U by clicking on this link

https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/2024-05-01 Appendix II-U Onshore Noise Report.pdf

Where can I get a copy of the Xi Engineering and Rand Acoustics noise studies *mentioned in the recent press release?* Good question, but we do not have an answer yet.

Several emails from the Round Up team requesting a copy of or a link to each study sent to Bob Stern, Save LBI and others associated with Save LBI have received no acknowledgement or response.

Online searches failed to find these specific studies. Several studies *were* located, however, that measured the impact of *underwater* noise generated by the construction of offshore wind turbines. Because the press release from Save LBI specifically mentioned research that measured *airborne* noise, finding studies with that specific focus was the objective.

What does "decibels weighted for human hearing" mean? From TechTarget Network⁵:

"A-weighted decibel (dBA or dB(A)) is an expression of the relative loudness of sounds as perceived by the human ear. A-weighting gives more value to frequencies in the middle of human hearing and less value to frequencies at the edges as compared to a flat audio decibel measurement.

A-weighting is the standard for determining hearing damage and noise pollution

Typical noise levels

- 20 dBA: whisper, quiet room
- 30 dBA: soft music
- 40 dBA: home computer fan
- 50 dBA: home air conditioning, light outside traffic
- 60 dBA: normal conversation
- 70 dBA: flushing toilet, home dishwasher, noisy room
- 80 dBA: server room, alarm clock, inside an airplane
- 85 dBA: accepted level of hearing damage⁶ over time

⁵ From the TechTarget website :This website is owned and operated by Informa TechTarget, part of a global network that informs, influences and connections the world's technology buyers and sellers. <u>https://www.techtarget.com/whatis/definition/A-weighted-decibels</u>

⁶ Per National Institute of Occupational Safety & Health, discussed in a section on page 5.

Science Notes, produced by the University of California, Santa Cruz, lists **85 dB** as the noise level for **wind and waves naturally occurring in the ocean**.⁷

- 90 dBA: lawnmower, hair dryer, blender
- 100 dBA: riding a motorcycle, construction site
- 110 dBA: rock concert, jackhammer
- 135 dBA: air raid siren
- 140 dBA: pain threshold, serious hearing damage possible, jet engine
- 150 dBA: handgun
- 180 dBA: rocket launch"

Access the full TechTarget article by clicking on this link https://www.techtarget.com/whatis/definition/A-weighted-decibels

The press release mentions the American National Standards Institute (ANSI) criteria for low frequency noise. What is the ANSI? What are those criteria?

ANSI is a **private nonprofit organization** that **oversees** the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States. The organization also **coordinates** U.S. standards with international standards so that American products can be used worldwide.

ANSI does not, however, establish criteria for anything. From ANSI's website⁸:

"ANSI is not itself a standards developing organization. Rather, the Institute provides a framework for fair standards development and quality conformity assessment systems and continually works to safeguard their integrity.

And as a neutral venue for coordination of standards-based solutions, the Institute brings together private- and public-sector experts and stakeholders to initiate collaborative standardization activities that respond to national priorities."

Per the ANSI website, it **does not make standards publicly available**, and charges money for access to these documents. According to Wikipedia,⁹ "The ANSI annual operating budget is funded by the sale of publications, membership dues and fees, accreditation services, fee-based programs, and international standards programs."

⁷ <u>https://sciencenotes.ucsc.edu/9601/OceanNoise/Noises.html</u> University of California, Santa Cruz is a research university.

⁸ <u>https://www.ansi.org/about/introduction</u>

⁹ https://en.wikipedia.org/wiki/American_National_Standards_Institute

For example, a search on its website for noise safety standards yielded only the ANSI webstore, which listed eleven guides about how to measure and assess noise levels with prices ranging from \$81 - \$233.¹⁰

If it is not from ANSI, then what is the standard regarding when noise is too loud and from where? The U.S. Department of Environmental Protection, National Institute for Occupational Safety & Health ("NIOSH") for the U.S. workplace environment and the World Health Organization have published guidelines.

From the U.S. Department of Environmental Protection ("DEP"), page 32:

"L_{dn} [day/night average sound level over a 24-hour period] of 45 dB indoors and of 55 dB outdoors in residential areas are identified as the maximum levels below which no effects on public health and welfare occur due to interference with speech or other activity."

The DEP first published its conclusions about safe levels of noise in March 1974 in a paper titled "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety." Online searches did not find any updates.

Access the full DEP report by clicking on this link https://nepis.epa.gov/Exe/ZyPDF.cgi/2000L3LN.PDF?Dockey=2000L3LN.PDF

From the National Institute of Occupational Safety & Health ("NIOSH"):

"NIOSH established a recommended exposure limit of 85 A-weighted decibels (dBA) averaged over an eight-hour workday. Workers who are exposed to noise at or above the NIOSH recommended exposure limit are at risk of developing significant hearing loss over their working lifetime.

Access "Noise-Induced Hearing Loss" from the NIOSH by clicking this link https://www.cdc.gov/niosh/noise/about/noise.recommended exposure limit

• From the World Health Organization ("WHO"), "Compendium of WHO and other UN guidance on health and environment", Chapter 11 Environmental noise, page 2:

For average noise exposure, WHO recommends "45 dB L_{den} for wind turbine

noise." Lden is the average level over days, evenings and nights in a year.

Access Chapter 11 of the WHO report by clicking on this link<u>https://cdn.who.int/media/docs/default-source/who-compendium-on-health-and-</u> environment/who_compendium_noise_01042022.pdf

Is it true that a change of 10 dBA means that actual noise intensity increases ten-fold? Yes. Intensity, however, is not the same thing as loudness, i.e., how

¹⁰ <u>https://webstore.ansi.org/industry/safety-standards/noise-safety/noise-exposure</u>

much louder you perceive the noise to be. The following from Merck Manual¹¹ is consistent across all reporting:

"Loudness is measured on a logarithmic scale. This means that an increase of 10 decibels (dB) represents a 10-fold increase in sound intensity and **a doubling of the perceived loudness.**

Thus, 20 dB is 100 times the intensity of 0 dB and seems 4 times as loud; 30 dB is 1,000 times the intensity of 0 dB and seems 8 times as loud."

Access the full article from Merck Manuals by clicking here <u>https://www.merckmanuals.com/home/multimedia/table/measurement-of-loudness</u>

Inversions: What are they? How often do they happen? How do they affect sound?

 <u>Definition</u>. From "What Is An Inversion?" from the National Oceanic & Atmospheric Administration ("NOAA") and the National Weather Service ("NWS):¹²

"Inversions are stable air masses where the cooler air is near the earth's surface and the warmer air is on top."

Normally, the temperature of **the air cools as you move away** from the earth, therefore, most of the time, the warmer air is layered closest to the earth with the cooler air layered on top of that. **In an inversion, it is just the opposite**: The cooler air, trapped by the layer of warmer air above it, sinks to the bottom, closest to the earth.

• How often do inversions happen? From the same NOAA/NWS article:

"Inversions are most likely when the sky is clear and the wind is light or calm because air near the ground cools more quickly than air aloft. These conditions often happen in **late afternoon** or **early evening** (before sunset) and linger through sunrise the next morning."

> Access "What Is Inversion" by clicking on this link https://www.weather.gov/media/lzk/inversion101.pdf

 <u>How do inversions affect sound</u>? Generally, sound can be heard at greater distances during inversion conditions. *From Wikipedia*:

¹¹ *From the Merck website*: "First published in 1899 as a small reference book for physicians and pharmacists, the Manual grew in size and scope to become one of the most widely used comprehensive medical resources for professionals and consumers.

As the Manual evolved, it continually expanded the reach and depth of its offerings to reflect the mission of providing the best medical information of the day to a wide cross-section of users, including medical professionals and students, veterinarians and veterinary students, and consumers." <u>https://www.merckmanuals.com/home/resourcespages/about-the-manuals</u>

¹² Part of the U.S. Department of the Commerce

"When an inversion layer is present, if a sound or explosion occurs at ground level, the sound wave is refracted [*redirected*] by the temperature gradient (which affects sound speed) and returns to the ground. The sound, therefore, **travels much better than normal.**"

From the University of Alaska Fairbanks Geophysical Institute:

"High pitched noises tend to pass through an inversion layer [*meaning they can rise through the warm, top layer, instead of being trapped in the cold, bottom layer*]. For that reason, whistles and other high frequency noises can't be heard as far away as the groan of a locomotive engine during an inversion."

Access the full Wiki article by clicking on this link <u>https://en.wikipedia.org/wiki/inversion</u>

Access the University of Alaska Fairbanks Geophysical Institute article by clicking on this link https://www.gi.alaska.edu/alaska-science-forum/jets-living-room-blame-inversions

 How much louder is sound in inversion conditions? From the Acoustical Society of New Zealand:¹³

Depending on the wind velocity and direction, inversion "conditions typically **increase noise levels by 5dB to 10dB** and have been known to increase levels by as much as 20dB."

Access the full article by clicking on this link https://www.acoustics.org.nz/files/journal/pdfs/

The press release states that noise from the pile drivers will be between 50 dBA – 55 dBA on shore. Does that seem right? Depends on several factors, including the distance between the pile driver and the person listening, atmospheric conditions, wind speed and wind direction.

*From Echo Barrier*¹⁴ *How Loud Is A Pile Driver*?: "Pile driving is one of the noisiest construction activities, reaching almost 120 dB from 10 feet away." Note that this statement describes noise produced by pile drivers on land, much like you hear during new home construction anywhere on the island.

Sound weakens over distance. If it did not, you would be hearing pile drivers operating in Holgate from your deck in Ship Bottom.

¹³ Lindsay Hannah, Sound and Temperature Effects, from Factors Affecting Outdoor Sound Propagation 2006, published in New Zealand Acoustics, Vol 20, #2

¹⁴ Echo Barrier is an international company specializing in temporary acoustic noise control across multiple industries. <u>https://blog.echobarrier.com/blog/how-loud-are-pile-drivers - :~:text=How Loud Is A</u> <u>Pile,the public and workers onsite.</u>

As a straightforward calculation without regard to the mitigating factors mentioned above, according to the WKC Sound Attenuation Calculator, from 8.7 miles away, that 120 dB would sound like 46.6 dB; from 9.5 miles away, 45.9 dB; from 11 miles away, 44.6 dB; from 13 miles away, 43.1 dB.

Access the WKC¹⁵ Sound Attenuation Calculator by clicking on this link <u>https://www.wkcgroup.com/tools-room/inverse-square-law-sound-calculator/</u>

Is the lawsuit mentioned in the press release referring to an additional lawsuit or to the one already filed in September 2024?

Within the past 3¹/₂ months, Save LBI has filed two lawsuits involving noise.

 On September 18, 2024, under the headline "LBI Sues Offshore Wind Company Over Noise Issues," *The Sandpaper* reported that Save LBI had sued the developers of the Atlantic Shores South project, filing in the Superior Court of NJ on September 13, 2024. According to the reporting in *The Sandpaper*,

"The lawsuit asks the court to determine that the lease area for Atlantic Shores South is not suitable for the size and scope of the project while also directing the company to perform a full airborne noise assessment and pilot project."

Access the full September 18 article in The Sandpaper by clicking on this link https://www.thesandpaper.net/articles/save-lbi-sues-offshore-wind-company-over-noise-issues/

2) The lawsuit mentioned in the recent press release was filed on January 10, 2025 in federal court in the District of New Jersey. The developer and six federal agencies were named as defendants.

According to the January 15 article in *The Sandpaper*, Save LBI said, "the lawsuit ultimately seeks to have all federal approvals rescinded and the Atlantic Shores South project halted ... " citing "a systematic underestimation of impacts by pile driving and operational noise ... "

Access the full January 15 article in The Sandpaper by clicking on this link https://www.thesandpaper.net/articles/trump-on-track-to-halt-wind-farms-approved-off-lbi/

THE ROUND-UPS

¹⁵ *From its website*: "WKC Group is a leading environmental consultancy specializing in technical studies, permitting and planning and advisory services. ... We find science-based solutions to help manage the trade-offs between projects and the environment in which they sit, helping to drive better and more sustainable outcomes for all.

All Offshore Wind Round-Ups were 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 through February 2025.

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

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

Round-Ups were **distributed** to the voting representatives of the eleven member organizations of the Joint Council of Taxpayers Associations of LBI (JCTA). The board members of each member association collectively made their own decisions about how and when this information was distributed to its members and/or the community. Most often, taxpayer associations used their regular communication platforms, such as newsletters, website postings and/or social media, to make Round-Ups **available to the public**.