

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

July 12, 2024

Lan Norris, Specialist
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Ft. Worth, TX 76177
By Electronic Filing: Lan.norris@faa.gov

RE: Aeronautical Study Number 2022-WTE-4702-OE; Wind Turbine AV08 Atlantic City, NJ -
Public Notice Dated June 6, 2024

Dear Mr. Norris:

Reference is made to the Public Notice dated June 6, 2024 in the above referenced matter issued by the Federal Aviation Administration (“FAA”) (the “Aeronautical Study”).¹

The Defend Brigantine Beach, Inc and Downbeach organization represents thousands of beach goers, renters, homeowners, owners and employees of tourist industry related businesses, artists, photographers, owners and employees of businesses related to real estate, owners and employees of fisheries, water sports enthusiasts, recreational fishermen and women and many others who have a vested interested in the health and well-being of our ocean, coastal ecology and environment and social and economic conditions in our coastal communities. Our representation spans all along the New Jersey Coast but is mostly concentrated in Atlantic County, namely the island of Brigantine and the ocean front communities of Absecon Island as well as bay front and other locally impacted communities. Our comments are presented below.

Sincerely,

Katherine Finnegan, President
Lisa Daidone, Vice President
Suzanne Moore, Treasurer
Tom Jones, Secretary
Cynthia Pekarick, Board Trustee
Sherri Lilienfeld, Downbeach Representative

¹ FAA, OE Circularized Cases for NJ Form 7460-1 for ASN 2022-WTE-4702-OE, <https://ocaaa.faa.gov/ocaaa/external/searchAction.jsp?action=displayOECASE&oeCaseID=556685169&row=0>; FAA Public Notice dated June 6, 2024, <https://ocaaa.faa.gov/ocaaa/external/WebBlobServlet>

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

According to the Federal Aviation Administration (FAA) notice, Forty-four Atlantic Shores Offshore Wind – South (ASOW-South) proposed turbines violate the FAA height obstruction standards by more than 2x, or 548 feet for the proposed 1047-foot structures. In addition, four ASOW-South proposed Meteorological Evaluation Towers (MET) exceed the FAA height obstruction standards by 100 feet. Despite these violations, BOEM has green lighted ASOW-South to begin construction with full federal permitting approval.

In 2012, the decision on the location of Lease No 0499 - at which time the wind energy area covered both the current Atlantic Shores South and North projects - off the New Jersey coastline was based on the size of 6 MW wind turbines for the project. In or around 2020, the Construction and Operations Plan for Atlantic Shores South was released, and the public was alarmed by the huge increase in the size of the wind turbines – from 6 MW to 15 MW- in the plan for the lease area. Was the FAA part of the decision to increase the size of the wind turbine from 6 MW to 15 MW? Did the FAA question the safety hazard of the increased size of the wind turbines at the time of the decision? Why is the FAA now questioning the height of the wind turbines many years after the size of the wind turbines became public information? The lease areas were sold in November 2015. Did the FAA propose any turbine height limits on the lease areas before they were sold? Has the FAA examined the cumulative impact of all the wind turbine projects totaling 2,000 wind turbines off the coast of New Jersey on the coverage areas of radar systems?

Because of the minimum doubling of size of the wind turbine, the radar cross section has significantly increased causing much greater radar interference. Wind turbines impact a radar's ability to perform its mission, independent of the type. It has been shown that wind projects affect commercial aviation radars, as well as military radars, weather radars, and border surveillance radar, just to name a few. Wind turbines are large obstructions with significant degrees of freedom. The combination of a large moving rotor, tracking of the wind (yawing), and the size of the machines create both a dynamic clutter and Doppler effect, which affects radars differently. The clutter of the machine is basically due to the return of the radar signal through reflectivity, and it is proportional to the radar cross-section (RCS) of the machine. Although the base of the tower is stationary, the nominal area of the turbine to the radar is dynamic since the machine is constantly tracking the wind. Wind turbines are made of highly reflective materials—steel, fiberglass, and carbon fiber composite—and can scatter and return a significant amount of energy. The turbine tower is the most reflective component, but since it is constantly stationary the rotor is the largest problem to the radar. In most cases the signature can be quite large and can affect the radars/operator's ability to differentiate the wind farm from flying aircraft and weather storms. The Doppler effect is due to the moving rotor and can affect the moving target indicator of a radar.

The US Department of Energy only recently completed its Report to Congress in February 2024, titled, "Update on the Efforts of the Wind Turbine Radar Interference Mitigation Working Group" [EXEC-2022-004484 - Report to Congress as of December 12 2023 \(energy.gov\)](https://www.energy.gov/exec-2022-004484-report-to-congress-as-of-december-12-2023).

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

In this Report, the DOE states,

“to date, no mitigation technology has been able to fully restore the technical performance of impacted radars.”

Typical of the language we have read in other agency reports when faced with offshore wind’s unsolvable problems, the DOE offers alternatives as opposed to a real solution such as

“development of interference mitigation techniques” and “collaboration among federal agencies, the government and the wind industry which has enabled federal radar agencies to continue to perform their missions.”

Most importantly, the Report states,

“the most basic and widely employed mitigation method is wind farm siting, such as modifying the layout of proposed wind farm to keep the wind turbines out the line-of sight of the radar.”

Therefore, the most effective way to solve Atlantic Shores South problem, according to the study, is to site the wind farm properly so that it does not interfere with radar. The Atlantic City Airport existed during the entire decision-making phase of the Wind Energy Area locations. What doesn’t make sense is that during the entire planning of the wind farm development, nothing was changed to address the spacing, location or removal of turbines and, in fact, the wind turbine size has more than doubled! The current untenable situation created by BOEM, NJDEP and other government agencies demonstrates their rushed, reckless and irresponsible handling of the Atlantic Shores South project along with the entire offshore wind program.

The Report provides a hollow excuse for not changing the siting of the wind turbine development as far as the Atlantic Shores South project is concerned.

“While changing the location of wind turbines may be the easiest option, the growth of wind turbine deployment coupled with the many other facets of wind farm siting is making this option less viable. This is because much of the desired areas with good wind resources have already been developed and there is less room to build outside the coverage area of radar systems.”

The Atlantic Shores South/North, along with Ocean Wind 1,2, lease areas were the first to be approved and sold to a developer by the Department of Interior. There were plenty of options to move this out of the line of site, therefore, this excuse is totally irrelevant to the decision made process for these wind developments.

In addition, whoever decided on the WEA locations for these projects was certainly not interested in reliable energy generation and/or made a huge mistake in selecting the Wind Energy

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

Areas. According to the wind study on Rutgers website, “The NJ Sea Breeze, Coastal Wind Shear, and Wind Power Potential”, the wind energy locations for Atlantic Shores South, North and the currently suspended Ocean Wind 1, and 2 have some of the worst conditions in the ocean for wind speed.

According to the Rutgers study,

“when analyzing the offshore and coastal wind resource during a “typical” sea breeze event, maximum wind intensities occur along the coast and decrease with increasing distance offshore until the influence of the sea breeze becomes minimal. This generally occurs at an offshore distance greater or equal to 25nm. **Consequently, wind generators located between 5nm and 30nm offshore may not have adequate wind speeds needed to produce the supplemental power required during peak demand periods.** Therefore, wind turbines located along the coast or far offshore may prove to be the most efficient for producing power when the sea breeze events coincide with peak energy demand.

To ensure efficient power production, very specific placement of the wind turbines within the area where the optimum wind resource occurs needs to be accomplished since the power generated by the wind is directly proportional to the wind speed cubed. Therefore, relatively small fluctuations in wind speed could translate into large power production variations. Based on this premise wind turbines should be located in an area with an adequate wind resource with minimal variability during both sea breeze occurrences and non-occurrences when power production may be critical for meeting energy demand. **A portion of the study domain including the Brigantine Shoals/Little Egg Inlet/Great Bay area and adjacent near offshore areas less than 5 nm or far offshore greater than 25 nm in of our wind energy analysis satisfies these criteria.”**

Could it be that to make up for this huge mistake on siting the Atlantic Shores projects in an area with inadequate wind speed resulted in a decision to greatly increase the size of the wind turbines to compensate for the insufficient and unprofitable wind energy generation? If true, this poor decision has now caused other problems with radar siting along with operational problems caused by greatly increased wind wakes, visual impacts, increased ocean ecological impacts, and significant fishing industry and tourism industry impacts. In addition, it is baffling that the US taxpayers’ money is being spent on solving a radar problem so that foreign wind energy companies can maximize their profits. There are five government agencies, including the FAA, who participated in the two yearlong Radar Interference Mitigation Working Group and so far, the problem still exists. How much more money will the government agencies have to invest in solving this problem for the foreign wind energy developers. Other key findings in the Report lack any viable solutions other than replacement of radar and infill radar solutions which come at another huge price tag at taxpayers’ expense.

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

It has been said that we must balance the risks of national security and aviation safety with our new energy security mission. Based on scientific studies, and actual wind development operation statistics on EIA.gov, the current energy policies are creating energy insecurity and a great risk to our national security. For example, the Block Island Offshore Wind Farm annual capacity factor ² has ranged from 46% in 2020 to 32% in 2021 and the annual capacity factor is decreasing as the project ages. The unreliability and unpredictability of the intermittent wind energy source is reflected in its documented energy output which varies from 7% to 63% of total capacity and has very little correlation to customer energy demand. This compares to dispatchable and reliable energy sources such as nuclear and natural gas with stable capacity factors of 90%+ and 73%+, respectively.

For the first time, the North American Electric Reliability Corporation (NERC) has identified the USA energy policy as a risk priority for grid reliability. This risk was added to their reports because of government mandates regarding decarbonization, decentralization and electrification including the reliance on intermittent and weather dependent, low-capacity energy sources such as offshore wind. NERC is now encouraging legislators and engineers to find new approaches to assess and ensure energy sufficiency for all hours throughout the year. The footprint on land or sea needed for low density energy such as wind turbines is far greater than traditional sources of energy such as natural gas and nuclear. As the number of installations increases, the siting challenges will increase, and the FAA should be held accountable for monitoring the impact of these installations for the safety of our country's aviation activities before lease areas are sold and permits are issued. We assume that the FAA considered the cumulative impact of all the windfarms off the east coast regarding flight safety.

Along with all the other negative impacts of the Atlantic Shores Offshore Wind Development, the FAA has only now notified the public of what seems to be a critical safety issue. Sadly, it is most likely that the FAA will be told that this project is too big to fail and there are too many jobs depending on its construction. ³As a result, the FAA may be asked to look the other way or be told to accept Atlantic Shores' promise that they will develop a solution before the operation of the turbines begins in 2028. Suffice it to say, the FAA could be asked to give its rubber stamp so that this reckless and irresponsible project can continue. What will happen if there is no solution by 2028? Will the FAA close Atlantic City International Airport so that foreign wind

² The net **capacity factor** is the ratio of actual electrical energy output over a given period of time to the theoretical maximum electrical energy output over that period. The theoretical maximum energy output of a given installation is defined as that due to its continuous operation at full nameplate capacity over the relevant period.

³ Our analysis based on the Atlantic Shores South COP's offshore wind workforce tables (7.1-11 to 7.1-19) for the life of the Atlantic Shores South project including development, construction, and decommissioning results in an additional workforce of 547 average annual direct jobs, 290 average annual indirect jobs and 364 average annual induced jobs. [Volume II \(boem.gov\)](#). Using the Atlantic Shores' methodology (jobs/MW/phase) for their job creation calculation, the entire goal of 11 GW of offshore wind will result in the addition of only 2,221 average annual FTE direct jobs, 1,177 average annual indirect jobs, and 1479 average annual induced jobs in NJ. Atlantic Shores' workforce tables in their COP define jobs in "job years". For example, 1 job with a duration of 10 years equals 10 job years. Preparing accurate job numbers using a more generally accepted job definition in other industries is important in calculating the cost/benefit of the offshore wind projects especially considering the thousands of average annual jobs that will be lost in the tourism and fishing industries along the NJ coastline.

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

energy companies can maximize their profits? Will the FAA keep the Airport open and allow the pilots, flight attendants and passengers to risk their lives so that the foreign wind energy companies can maximize their profits?

In addition to the newly released FAA communications concerning Atlantic Shores wind turbine height violations, we have other concerns about the Atlantic City Range Complex and whether its flight safety impacted by the offshore wind projects has been addressed.

In the 2012 published Environmental Assessment, BOEM stated that “the Atlantic City OPREA is an area used for surface, sub surface and air warfare training exercises located off the coast of New Jersey (Global Security 2011). Approximately 40 OCS blocks in the New Jersey WEA are located in Warning Area 107A (W-107A) and roughly 1 ½ OCS blocks are located in Warning Area 107C (W-107C). The W-107A and W-107C areas are designated special use airspace over the Atlantic City OPAREA and are used for surface-to-air gunnery exercises using conventional ordinance and exercises (Global Security 2011).

The Atlantic City is one of three east coast range complexes, known as the Northeast Range Complex, which encompasses a water component, airspace and land component where training and testing of military platforms, tactics, munitions, explosives and electronic warfare systems occur. These range complexes include established Operating Areas (OPAREAs) and special use airspace (SUA), which may be further divided to provide better control of the area and events being conducted for safety reasons. The Atlantic City Range Complex is one of the United States Navy’s major training and testing events and infrastructure. The Atlantic City Range Complex includes special use airspace with associated warning areas and surface and subsurface sea space of the Atlantic City OPAREA.

The offshore component of the Atlantic City Range Complex consists of surface sea space and subsurface space and associated SUA. This offshore Atlantic City Range Complex is used for United States Atlantic Fleet training and testing exercises. The offshore Atlantic City Range Complex additionally supports training and testing by other services, primarily USAF units from nearby bases. As part of the range complex, the Atlantic City OPAREA extends from the shoreline seaward to approximately 100 nm from land at its farthest point. The subsurface portion of the Atlantic City OPAREA has the same boundaries as the surface water portion. Will the DOD also close the Atlantic City Range Complex or relocate it to a different area so that the foreign wind developers can maximize their profits?

In conclusion, we oppose the proposed Atlantic Shores wind project that creates severe risks to aviation safety and community welfare that cannot be mitigated by the current proposed measures.

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

CONFIDENTIAL PERSONALLY IDENTIFIABLE INFORMATION

Anne M. Zaneski
Brigantine, NJ 08203
anne_zaneski@hotmail.com

July 11, 2024

Lan Norris, Specialist
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Ft. Worth, TX 76177
By Electronic Filing: Lan.norris@faa.gov

RE: Aeronautical Study Number 2022-WTE-4702-OE
Wind Turbine AV08 Atlantic City, NJ - Public Notice Dated June 6, 2024

Dear Mr. Norris:

Reference is made to the Public Notice dated June 6, 2024 in the above referenced matter issued by the Federal Aviation Administration (“FAA”) (the “Aeronautical Study”)⁴.

I am writing to express significant concerns about the proposed Atlantic Shores Offshore Wind turbines for quality of life for residents in Atlantic City and surrounding areas, including neighboring Brigantine less than five miles away, as detailed in Aeronautical Study Number 2022-WTE-4702-OE (Wind Turbine AV08 Atlantic City, NJ - Public Notice Dated June 6, 2024).

Aviation Safety Concerns: The proposed wind turbines, standing at 1,047 feet above ground level, pose a severe risk to both commercial and general aviation. This height far exceeds the obstruction standards by law and directly interferes with airspace used by aircraft operating under visual flight rules (VFR). The turbines' proximity to Atlantic City International Airport (ACY) exacerbates these risks, as aircraft already fly at low altitudes in this area, adding to existing aviation hazards.

⁴ FAA, OE Circularized Cases for NJ Form 7460-1 for ASN 2022-WTE-4702-OE, <https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=displayOECASE&oeCaseID=556685169&row=0>; FAA Public Notice dated June 6, 2024, <https://oeaaa.faa.gov/oeaaa/external/WebBlobServlet>.

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

Impact on Air Navigation: The presence of these towering structures could significantly obstruct established flight paths, increasing the risk of collisions and compromising the safety of both helicopter and fixed-wing operations in the region. The Atlantic Shores turbines' (the "Project") location within 2 statute miles of a potential VFR route further highlights the potential for substantial adverse effects on VFR air navigation.

Inadequate Mitigation Measures: Any proposed mitigation measures must be comprehensive and prioritize safety over financial compensation. The potential for catastrophic accidents necessitates a more substantial and comprehensive mitigation strategy that addresses the full scope of inadequate mitigation measures and risks these turbines introduce.

Environmental and Community Impact: The introduction of such obstructions could jeopardize established aviation events, such as the annual Atlantic City Airshow, which draws over hundreds of thousands of visitors each year – over 750,000 attended in 2009 - and is one of the largest air shows in North America.⁵ The United States Navy Blue Angels perform an annual and memorable air show that is a historical all-time favorite for Atlantic City. The risks these turbines bear to our Navy pilots and the safety of visitors are unacceptable.

Visual Impacts of Wind Turbine Lights: Residents near ACY, Atlantic City, neighboring Brigantine, and along the shorelines of New Jersey are already burdened by the negative visual impact of wind turbine lights at night. The bright, flashing lights disrupt the natural nightscape and the quality of life for residents in these areas. It is unacceptable that we continue to bear these negative impacts due to the Atlantic Shores wind project.

Impact on Atlantic City International Airport (ACY) and Specific Concerns for Atlantic City: The proposed wind farm is located approximately T18.50 to 21.50 nautical miles southeast of the airport reference point for Atlantic City International (ACY). The presence of these turbines may require changes in procedure for aircraft operations at ACY, potentially increasing the aircraft operating under hold-in-lieu of procedure turn (HILPT) and intermediate fix crossing altitudes.⁶

Request for Comprehensive Review: I urge the FAA to conduct a thorough and comprehensive review of the proposed wind turbines' impact on aviation safety and community welfare. It is crucial that all potential risks are meticulously assessed, and that the safety and well-being of both the aviation community and local residents are prioritized.

The FAA's Public Notice contemplates an aeronautical study to assess the impact of the proposed wind turbine project by Atlantic Shores on airspace use and navigation, with a key notice provision examining the grotesque height of the wind turbines:

⁵ Wikipedia, https://en.wikipedia.org/wiki/Thunder_over_the_Boardwalk.

⁶ FAA letter to Atlantic Shores dated June 6, 2024, p. 6.

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

“Heights: 0 feet site elevation (SE)
1047 feet above ground level (AGL)
1047 feet above mean sea level (AMSL) “⁷

Other key findings outlined in the Public Notice for study, remarkably, are how much the proposed Project’s wind turbines exceed the legal obstruction standards. “The structure above exceeds obstruction standards. To determine its effect upon the safe and efficient use of navigable airspace by aircraft and on the operation of air navigation facilities, the FAA is conducting an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77.“

As detailed in pertinent part by the FAA’s own letter, the Project has exceeded FAA’s Obstruction Standards, **specifically exceeding the height limit of 499 feet at the site and “All proposed wind turbines would exceed this standard by 548 feet. The proposed MET would exceed this standard by 100 feet.”** (Emphasis added).⁸ Thus, this height far exceeds the obstruction standards and directly and dangerously interferes with airspace.

Also jarring, the FAA also noted in its own findings letter that this height could interfere with terminal obstacle clearance areas, including initial approach segments, departure areas, and that the proposed wind farm could adversely affect visual flight rules.⁹

In pertinent part, the public notice on pp. 4-5 describes the proposed project as follows:

“PROPOSAL DESCRIPTION

This offshore proposal is for the Atlantic Shores Wind - South wind farm which will include 44 offshore wind turbines and 4 Meteorological Evaluation Towers (MET). The Atlantic Shores Wind - South wind farm would be located approximately 18.60 NM to 23.30 NM east-southeast, extending clockwise, to approximately 18.50 NM to 21.50 NM southeast of the airport reference point (ARP) for Atlantic City International (ACY) Atlantic City, NJ.

The wind turbines are being circularized for public comment under this Aeronautical Study Number (ASN) 2022-WTE-4702-OE, which represents the proposed turbine that would be located at approximately the center of this wind farm project (see attached maps). Comments on any of the proposed wind turbines in this project must be submitted under this ASN. All comments received from this circularization will be considered in completing the separate determinations for each wind turbine.

⁷ *Id.*, p. 1.

⁸ *Id.*, Title 14 CFR Part 77 – Obstruction Standards Exceeded, Section 77.17(a)(1).

⁹ *Id.*, Section 77.17(a)(3).

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

For the sake of efficiency, all of the wind turbines in this project have similar impacts and are included in this narrative. The proposed structures' described heights, and locations are expressed in Above Ground Level (AGL) height, Above Mean Sea Level (AMSL) height and latitude / longitude.

...

TITLE 14 CFR PART 77 - OBSTRUCTION STANDARDS EXCEEDED

Section 77.17(a)(1); exceeds a height of 499 feet AGL at the site of the object. All proposed wind turbines would exceed this standard by 548 feet. The proposed MET would exceed this standard by 100 feet.

Section 77.17(a)(3); a height within a terminal obstacle clearance area, including an initial approach segment, a departure area, and a circling approach area, which would result in the vertical distance between any point on the object and an established minimum instrument flight altitude within that area or segment to be less than the required obstacle clearance.

Atlantic City International (ACY) - ILS OR LOC/DME RWY 31; The following would increase the Hold-in- lieu of procedure turn (HILPT) and the Intermediate Fix crossing at STEVV from 2000 feet to 2100 feet.

...

TITLE 14 CFR PART 77 - EFFECT ON AERONAUTICAL OPERATIONS

Section 77.29 (a)(1); the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules. At a height greater than 499 feet AGL, the proposed wind farm would extend into airspace normally used for VFR en route flight and located within 2 statute miles (SM) of a potential VFR Route as defined by FAA Order 7400.2, Section 6-3-8. The turbines within 2 SM of a VFR route would have an adverse effect upon VFR air navigation. Further study is required to determine whether the structures would affect a significant volume of VFR aircraft resulting in a substantial adverse effect on VFR en route traffic. "¹⁰

¹⁰ *Id.*, <https://ocaaa.faa.gov/ocaaa/external/searchAction.jsp?action=displayOECASE&ocCaseID=556685169&row=0>; FAA Public Notice dated June 6, 2024, <https://ocaaa.faa.gov/ocaaa/external/WebBlobServlet>. The Public Notice reads in pertinent part:

“** PUBLIC NOTICE **

The Federal Aviation Administration is conducting an aeronautical study concerning the following:

Structure: Location: Latitude: Longitude: Heights:

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

Wind Turbine AV08 Atlantic City, NJ 39-19-20.30N NAD 83 74-09-40.80W

0 feet site elevation (SE)
1047 feet above ground level (AGL) 1047 feet above mean sea level (AMSL)

The structure above exceeds obstruction standards. To determine its effect upon the safe and efficient use of navigable airspace by aircraft and on the operation of air navigation facilities, the FAA is conducting an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77.

** SEE REVERSE SIDE FOR ADDITIONAL INFORMATION **

In the study, consideration will be given to all facts relevant to the effect of the structure on existing and planned airspace use, air navigation facilities, airports, aircraft operations, procedures and minimum flight altitudes, and the air traffic control system.

Interested persons are invited to participate in the aeronautical study by submitting comments to the above FAA address or through the electronic notification system. To be eligible for consideration, comments must be relevant to the effect the structure would have on aviation, must provide sufficient detail to permit a clear understanding, must contain the aeronautical study number printed in the upper right hand corner of this notice, and must be received on or before 07/13/2024.

This notice may be reproduced and circulated by any interested person. Airport managers are encouraged to post this notice.

If we can be of further assistance, please contact our office at (404) 305-6645, or Lan.norris@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-WTE-4702-OE.

Page 1 of 10

Signature Control No: 556685169-623644775

Lan Norris Specialist

Attachment(s)
Part 77
Additional Information

Case Description

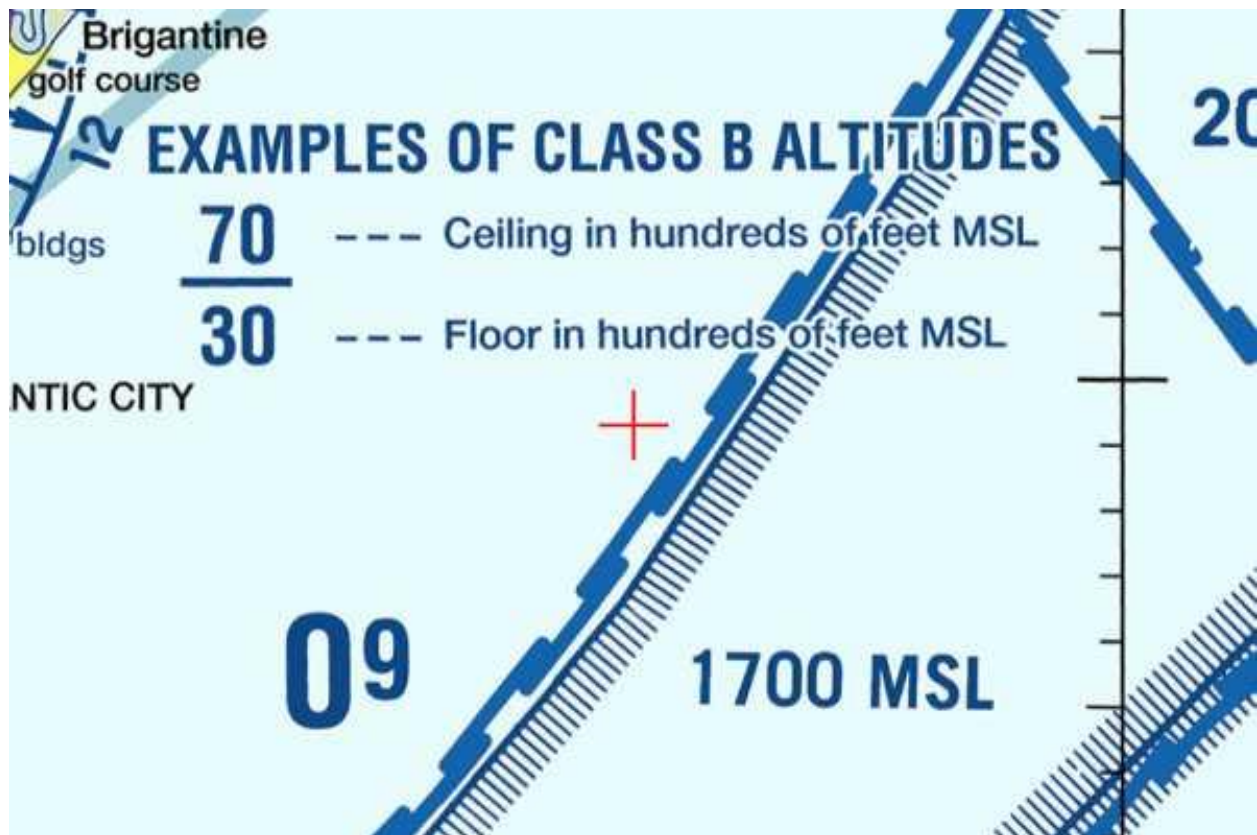
Map(s)

Proposal: To construct and/or operate a(n) 44 offshore wind turbines and 4 Meteorological Evaluation Towers

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

The Public Notice also provides a visual map of the impact to airspace, in the attached “Proposed offshore wind array located off the coast of New Jersey” on pp. 9-10. The attached map describes “Examples of Class B Altitudes” and shows impacts in Atlantic City as well as the City of Brigantine’s golf course:

Map for ASN 2022-WTE-4702-OE



As a Brigantine, New Jersey homeowner, stakeholder, and concerned citizen, I am writing to respectfully request FAA also consider BOEM’s other wind turbine leases in the area. For example, there is a New York Bight Draft Programmatic Environmental Impact Statement (“PEIS”) for the

(MET) to a height of *SEE PAGE 4* feet above ground level, *** feet above mean sea level.

Location: The structure will be located *SEE PAGE 4* nautical miles *** of *** Airport reference point. **Part 77 Obstruction Standard(s) Exceeded:**

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

proposed project comprising six NY Bight lease areas (“the Project”) offshore New Jersey and New York.

In addition, I am writing to record my complete disapproval of the Project, including lack of adequate notice in the PEIS process resulting in loss of due process for the stakeholders and affected environmental justice communities, lack of adequate mitigation analysis (aka “AMMM Measures”), failure to analyze “focused, regional cumulative effects”¹¹ and other violations of NEPA, and respectfully request that FAA rule that the Atlantic Shores projects should be halted in their entirety.

To summarize, this Project should be denied for a number of reasons:

1. Part 77 Obstruction Standard(s) are Exceeded, for Atlantic Shores wind turbines in Atlantic City.
2. Not only do this Project’s Atlantic Shores wind turbines exceed obstruction standards, but the cumulative effects of this wind farm must be taken into context of other wind farms: notably the NY Bight project. That project has also been deemed by FAA to exceed obstruction standards.¹²
3. Security is of national importance and needs to be taken into consideration by Homeland Security.
4. The Project’s wind turbines are already determined to be too high by FAA. This unproven technology comprising the tallest turbines in the world will interfere with flight patterns of Atlantic City International airport, according to the FAA’s own documents.
5. The Atlantic Shores FAA Application is misleading for the following reasons:
6. Atlantic Shores states in its Application that turbines are not within 12 NM, but that is disingenuous: the BOEM application clearly shows turbines within the vicinity of under 9 NM.¹³
7. The Application is misleading because Atlantic Shores states that there is “No Airport within 12NM,” yet the FAA acknowledges that the proposed wind farm is located within the vicinity of the airport, approximately T18.50 to 21.50 nautical miles southeast of the airport reference point for Atlantic City International (ACY).¹⁴
8. The Application is misleading because it fails to provide a work schedule.
9. The Application is misleading because it fails to provide “Current Marking/Lighting: N/A Proposed Structure.” Under BOEM’s own application, there will be lighting which may interfere in aviation.¹⁵

¹¹ BOEM PEIS, Docket No. BOEM-2024-0001 (“PEIS”), at ES-4.

¹² See JFK obstruction notice letter from FAA dated May 28, 2024, <https://ocaaa.faa.gov/ocaaa/external/WebBlobServlet>.

¹³ Atlantic Shores DEIS, Sec. 3.6.4-26.

¹⁴ FAA Public Notice dated June 6, 2024, p. 4, <https://ocaaa.faa.gov/ocaaa/external/WebBlobServlet>.

¹⁵ *Id.*, Atlantic Shores DEIS

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

10. The Atlantic Shores Application is deficient because the “Frequencies” section is left blank. Frequencies could potentially interfere with FAA, military and airplane frequencies, possibly leading to accident or injury.¹⁶
11. The FAA, and by extension, BOEM, need to take into consideration the cumulative effects of not only this Project’s Atlantic Shores wind turbines, but also the wind turbines of nearby Ocean Wind lease area, which is eligible to go back on the market for another lease, the NY Bight projects, as well as other BOEM leases in the surrounding area. Brigantine, less than five miles from Atlantic City, unfortunately straddles all these projects, and **there is a total of over 1,800 wind turbines now projected for the area.**¹⁷
12. That BOEM is hiding the effects of all these wind turbines through the use of a PEIS, not fully studying the effects of the wind turbines, also needs to be taken into consideration. Their expediency and cutting corners show a failure of good government and demonstrates lack of good faith as does the incomplete project applications by Atlantic Shores. The FAA must act as a governmental check and balance.¹⁸

¹⁶ This needs to be studied by Homeland Security.

¹⁷ See BOEM Docket Number: BOEM-2024-0001, New York Bight Draft Programmatic Environmental Impact Statement, January 2024 at D2-3, D2-4 (“BOEM PEIS”) (number of New Jersey turbines only, now totals 1,816 – more than one and a half times the amount than that proposed a scant nine months ago). Over 1,800 skyscraper-size wind turbines by BOEM’s own count, with blades the size of a football field in length - taking together “as many as three offshore wind projects (Atlantic Shores North, Ocean Wind 1 and Ocean Wind 2) that could be under construction simultaneously in the New Jersey lease areas,” and adding to these the additional six NY Bight projects – to give full measure in plain terms of the full impact my fellow Brigantine residents can fully appreciate and that leave us in despair.

¹⁸ BOEM promoted a 1,000 page¹⁸ PEIS, including a highly technical Appendix,¹⁸ for such a complex Project comprising six lease areas in the NY Bight, and the cumulative effects on the other regional BOEM lease areas.

Indeed, the PEIS process by BOEM gave short shrift to the mitigation and analysis process of the offshore coasts and cumulative impacts by only providing summary estimates of impacts and providing no plans¹⁸ for any of the six NY Bight projects, in opposition to its own acknowledgement of the cumulative impacts that this project will have combined with BOEM’s other lease areas.

Appendix C of the PEIS provides for how the Project will be used; however, the qualified impact does not act the way the Project was designed.¹⁸ The PEIS is faster for the federal government but at the same time, its vagueness is giving the wind industry a free pass at the expense of the local environment, New Jersey’s local economies, the health and welfare of its human, marine, avian and other coastal inhabitants and ocean floor - all of which will be exposed to and have their ecosystems severely disrupted because of BOEM’s inefficiencies in the PEIS process. Further, the Atlantic City area disproportionately will bear the effects of the six NY Bight lease areas’ cumulative effects on an already overburdened population.¹⁸

The Council on Environmental Quality (“CEQ”) and NEPA define cumulative impacts as “Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”¹⁸

BOEM has acknowledged the cumulative effects of their offshore wind program going back to 2007 with their PEIS for Alternative Energy Development and Production and Alternate Use of Facilities on the Outer Continental Shelf.¹⁸ With this PEIS for the NY Bight Project, BOEM intends to provide a “baseline analysis that

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

That there would be such dangerous environmental and health effects because of installation and operation of the Project as proposed - adding cumulative effects to the other BOEM leases starting only 9 miles offshore - shows that these offshore wind turbine projects' effects are not fully mitigated and not discussed by BOEM in the PEIS.

In conclusion, as a stakeholder in this Project, I join numerous others including local entities such as Defend Brigantine Beach, Inc. in opposition to the proposed Atlantic Shores wind project that poses severe risks to aviation safety and community welfare that cannot be mitigated by the current measures proposed.

Further, I respectfully request that FAA consider the lack of adequate notice posed by the incomplete Project applications submitted by Atlantic Shores, resulting in lack of transparency,

helps to satisfy the requirements of NEPA for offshore renewable energy leasing,"¹⁸ because "many wind energy projects will have similar environmental impacts."¹⁸ This PEIS does not satisfy NEPA's cumulative impacts requirement today because BOEM has significantly altered and expanded their offshore wind program not only over the years but even in the past nine months, making the PEIS's "analysis of cumulative environmental impacts inaccurate and outdated and requiring a supplemental or new Environmental Impact Statement analyzing the current program as it now exists."¹⁸

These are legitimate concerns that many longstanding and respected environmental groups have expressed. For example, at the last virtual public hearing for the PEIS held on February 13, 2024, the Nature Conservancy expressed concern about the lack of plans, among other things.¹⁸ This is a global environmental conservation group in existence for over 73 years.¹⁸ So too did Clean Ocean Action publicly comment, a 40-year old local New Jersey Shore organization advocating for the environment.¹⁸

Why the rush? "Reduce Redundancies" and "Timely" are the hallmarks of the PEIS process to make it efficient and streamlined for the government but not for the environment or the public.¹⁸ It comes off as political expediency and industrializing the oceans rather than saving the environment from harm. The truth is the clock is ticking for BOEM from the presumptive time limit of two years for completing the EIS in accordance with the CEQ implementing regulations effective May 20, 2022.¹⁸ Rather than reasoned analysis, BOEM's failure to analyze the cumulative environmental impacts of its offshore wind program is arbitrary and capricious and violates NEPA.¹⁸

Mitigation of the cumulative effects of the projects situated behind overlapping projects are not even shown in the PEIS,¹⁸ in violation of NEPA.¹⁸ For example, more studies are needed to show that the noise from the pile driving and sonar activities are not certainly confusing the mammals and leading to localized stranding such as the baby seal pup only days ago ending up a quarter mile from the ocean right in the middle of a commercial street nearby along the New Jersey Shore in Ocean City.¹⁸ Appendix D shows old studies based on 2019, five years ago, not considering the cumulative impacts of the additional BOEM lease sites, thus nullifying the mitigation measures.¹⁸ One can only imagine the cumulative effects of thousands of vessel traffic,¹⁸ and noise, then layering the six lease projects in the NY Bight plus the additional BOEM lease areas all being worked on at once. The effects of which will result in not only thousands of "Takes" that BOEM estimated before the cumulative impacts of the NY Bight leases¹⁸ - likely only a starting number, with additional EMFs, sound noise and ill effects on humans as well.¹⁸

DEFEND BRIGANTINE BEACH INC. & DOWNBEACH
BOX 562
BRIGANTINE NJ 08203
DefendOurBeaches.ORG
Defendbrigantinebeach@gmail.com

loss of due process, inadequate mitigation in the PEIS as written, and other violations of NEPA, Title 14 CFR Part 77 and FAA's own policies and procedures, and take all action necessary to prevent any adverse outcomes.

Very truly yours,

/s/ Anne M. Zaneski

cc: Karen J. Baker, Chief, Office of Renewable Energy Programs, BOEM
U.S. Congressman Jefferson H. Van Drew, R-NJ (Dist. 2)
Mayor Vincent J. Sera, City of Brigantine, NJ
Dr. Suzanne Moore, Defend Brigantine Beach, Inc. and Downbeach