The Offshore Wind Farm Round-Up

Issue #4 August 8, 2022

The Offshore Wind Farm Round-Up endeavors to periodically provide a review of recent research efforts in which the effects of offshore wind farms have been studied. In addition, it occasionally offers factual, clarifying information, in response to readers' suggestions.

Like the popular FAQ produced last year, 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.

This Round-Up edition includes links related to

- Questions prompted by a recent article in *The Sandpaper* regarding visibility of the offshore wind
- The timeline for the creation and release of the final version of the Environmental Impact Statement (EIS) for the current Atlantic Shores project
- Extension of the deadline for public comment about environmental impacts of the Ørsted Ocean Wind 1 project

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ARTICLE PUBLISHED IN THE SANDPAPER JUNE 29, 2022

We received many questions and comments about the article published on page 18 of the June 29th edition of *The Sandpaper* with the headline "Initial Study Shows Turbine Visibility Will Be Rare Off LBI."

> If you missed it, click here to access this issue of The Sandpaper online. Or, the Long Beach Island Library in Surf City keeps a copy of back print issues that you may borrow and read at the library.

Gordon Perkins, who is quoted at length in the article, was a key speaker at the June 16 online open house that was hosted by Atlantic Shores. The open house focused specifically on visibility. Many who contacted us expressed a desire to see and hear first-hand what he said in this forum, not just read a summary of his remarks in the paper.

Here is a link to the video of that online open house, in which Mr. Perkins participated: https://atlanticshoreswind.net/?utm_source=AS+JUNE&utm_campaign=908e8fd8d0-EMAIL_CAMPAIGN_2022_04_22_04_15_COPY_01&utm_medium=email&utm_term=0_6ba943f3ac-908e8fd8d0-449220001

Rutgers Visibility Study Many noted that they are particularly keen on getting their eyeballs on the Rutgers visibility study, which was mentioned often in this article. Commissioned and funded by Atlantic Shores, the study's official title is "Initial Visibility Modeling Study for Offshore Wind for New Jersey's Atlantic Shores Offshore Wind Project"[1] and it was produced by the Center of Observing Ocean Leadership at Rutgers School of Environmental & Biological Sciences.

To date, we have been unable to find a link to the FINAL version of this study. A DRAFT version, however, appears in the Atlantic Shores' Construction and Operations Plan ("COP") submitted September 2021 to the Bureau of Ocean Energy Management ("BOEM").

Note that the Rutgers study *does not* specifically focus on the leased area east of LBI. In this study, predictive models were used to determine visibility using past meteorological data from the Atlantic City International Airport and the Ocean City Municipal Airport.

Access a draft version of the Rutgers study by clicking on this link:
https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Appendix-II-M1-Visual-Impact-Assessment.pdf

After you click, you end up on the BOEM website where the COP is available for public scrutiny. Specifically, you will find yourself at page one of Appendix II – M1 Visual Impact Assessment (VIA) – Wind Turbine Area. The Rutgers study is Attachment H, the last eleven pages of this very long Appendix.

Jump down to the very end of the document and then back scroll back eleven pages to get to the beginning of the Rutgers study.

A link to a more recent study, which **covers the specific area off the coast of LBI in which Atlantic Shores intends to build**, is included below. This study was conducted by Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. ("EDR")[2] and it was updated March 2022.

Access the EDR report by clicking on this link:
https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/Appendix-II-M1-Visual-Impact-Assessment_0.pdf

HIGHLIGHTS

[1] Authors: Joseph F. Brodie, Ph.D. Marine Studies University of Delaware & Offshore Research Lead Rutgers Center for Ocean Observing Leadership ("RUCOOL"); Brian P. Frei, RUCOOL

[2] "Technical Report: Visual Impact Assessment -- Wind Turbine Area Atlantic Shores Offshore Wind OCS-A 0499" Individual authors are uncredited. EDR's website is https://www.edrdpc.com/

- In very precise detail, the first 77 pages of this 132-page report describes the approach and methodology used to identify the entire geographical area that could be potentially visually impacted by the presence of the turbines, all of factors that needed to be analyzed to fully understand the impact and the criteria on which to base the evaluation of the data.
- The analysis of the potential visibility of the offshore wind turbines was based on 200 points representing the exact locations of each of the 200 wind turbines currently projected to be built in this project. The latitude and longitude coordinates of each wind turbine were provided by Atlantic Shores. *(page 62)*
- The analysis was based on the assumption that all of the wind turbines used in this project would be 1,047 feet tall with maximum blade height visible (in other words, it was assumed that a blade would be straight up, which would create the maximum area of potential visibility.) The assumed height of a viewer was six feet. *(page 62)*
- Section 2.3.2 Selection of Key Observation Points explains how the EDR team selected 13 key observations points—all within the geographical zone which would be the most impacted visually -- for the development of visual simulations. All of these 13 sites feature typical views from where the wind turbines are most likely to be visible and they are the most representative of other observation points of the same type in the same geographical area. *(page 66*)
- A chart includes a short summary of the selection criteria that resulted in the Beach Haven Historical District (BHT01) and the beach east of the Long Beach Island Foundation for the Arts & Sciences in Loveladies (LBT03) to be chosen as two of the thirteen key observation points *(page 67*).
- **Beach Haven:** "The presence of the wind turbines resulted [in a score] that indicates they could result in a significant degree of visual contrast with surrounding seascape/ocean . . . At a distance of 13.5 miles to the nearest wind turbine, atmosphere perspective[3] is likely to reduce the visuality and visual contrast experience by viewers, particularly during the height of the summer season. . . . Based on the 2019 meteorological data, the atmospheric conditions represented in the photosimulations (visibility extending to 32 miles) only occurs during approximately 7% of the daylight hours in August. Two additional photosimulations were created to illustrate atmospheric conditions that occur during 15% and 20% of the daylight hours in August [in Beach Haven]. Only the first few rows of the wind turbines are faintly visible on the horizon in the 15% scenario. In the 20% scenario, even the nearest wind turbine becomes difficult to see through the atmospheric haze. . . . It is important to note that during these atmospheric condition scenarios, weather conditions on the shore are still

[3] Re: Atmospheric perspective: "Moisture and atmospheric particles will always have a significant influence on visibility over the ocean regardless of the size of the technology." (*page 6*)

perceived as clear and viewers would likely characterize the day as very clear." (*page 109*)

- **Beach east of LBI Foundation of the Arts & Sciences**: "The simulation from this key observation point is looking due south. While this is not the primary view for people relaxing and looking out over the water, individuals walking south will see the wind turbines on clear days. . . . At a distance of 24.9 miles, the [score] indicated that the [wind turbines] could be a major focus of viewer attention during clear viewing conditions. Atmospheric perspective is anticipated to minimize the wind turbines contrast during most summer days . . . It is important to note that visibility extending to a distance of 24.9 miles is an exceptionally rare occurrence and does not constitute typical or normal viewing conditions." (*page 108*)
- "An important consideration in visual impact assessment is to avoid the assumption that project visibility automatically equates to an adverse visual impact. The degree of project visibility will vary greatly depending on the distance of the viewer from the project, meteorological conditions, degree of screening from structure, vegetation, curvature of the earth, visual acuity of the viewer and the ability of the viewer to recognize offshore wind turbines." (*page 126)*

TIMELINE: ENVIRONMENTAL IMPACT STATEMENT ("EIS")

Activity around the creation and publication of the final Environmental Impact Statement (EIS) for the current Atlantic Shores project happens in three phases:

1) **September 30, 2021** A Notice of intent ("NOI") to prepare an environmental impact statement (EIS) was posted by the Bureau of Ocean Energy Management ("BOEM"). This notice appeared September 30, 2021 and the public was invited to submit comments through November 1, 2021. BOEM held three virtual scoping meetings about the EIS in October 2021.

Here is a description of the scoping process, per the link below:

> This NOI commences the public scoping process to identify issues and potential alternatives for consideration in the Atlantic Shores EIS. Throughout the scoping process, Federal agencies; Tribal, State, and local governments; and the general public have the opportunity to help BOEM determine significant resources and issues, impact-producing factors, reasonable alternatives (*e.g.,* size, geographic, seasonal, or other restrictions on construction and siting of facilities and activities), and potential mitigation measures to be analyzed in the EIS, as well as to provide additional information.

Learn more about this Notice of Intent (NOI) by clicking on the link below[4]

[4] This website http://www.regulations.gov/ is managed by the General Services Administration. It was launched in January 2003 and it removes the logistical barriers that made it difficult for a citizen to participate in the complex regulatory process. Before

https://www.regulations.gov/document/BOEM-2021-0057-0001

2) **November 2022** From the Federal Register: "After the draft EIS is completed, BOEM will publish a notice of availability (NOA) and request public comments on the draft EIS. After the public comment period ends, BOEM will review and respond to comments received and will develop the final EIS.

BOEM expects to issue the NOA for the draft EIS in November 2022."

3) **August 2023**. From the Federal Register: "BOEM expects to make the final EIS available to the public in August 2023. The availability of the final EIS is announced in a Federal Register notice and press releases."

Here is the link to the information included above from the Federal Registry https://www.federalregister.gov/documents/2021/09/30/2021-21300/notice-of-intent-to-prepare-an-environmental-impact-statement-for-the-atlantic-shores-offshore-wind

For an overview of the Environmental Impact Statement process, click here: https://www.boem.gov/environment/environmental-assessment/what-environmental-impact-statement-eis-process

COMMENT DEADLINE EXTENDED FOR OCEAN WIND 1

Excerpts below are from the article in the *Asbury Park Press* with the headline "Feds Extend Comment Period For Offshore Wind Project" written by Amanda Oglesby and published August 4, 2022. The link to the full article is included at the end of this section.

> "The federal Bureau of Ocean Energy Management extended the deadline for public comment on the environmental impacts of an offshore wind project after facing complaints 45 days was not long enough to review the 1,408-page impact statement.
>
> Some Jersey Shore residents, environmentalists and politicians pushed the bureau to extend the timeline for public input on Ocean Wind 1, a project by Denmark-based energy company Ørsted and Newark-based power company The Public Service Enterprise Group. . . . .
>
> Construction would erect up to 98 wind turbines across Ocean Wind 1's lease area.
>
> On Wednesday, the Bureau of Ocean Energy Management announced the public would receive a 15-day extension to comment on the project's

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this website existed, there was no one place you could go to find the regulatory information and documents you were looking for. You would have had to know the sponsoring agency, date of publication and then read the document in the specific agency's reading room, adhering to the comment process for that particular agency.

environmental impacts, moving the deadline to receive comments from Aug. 8 to Aug. 23. . . ."

Access the full article by clicking on this link:
https://www.app.com/story/news/local/land-environment/2022/08/04/nj-offshore-wind-project-public-gets-extra-time-to-comment/65391247007/

This Round-Up was prepared by a group of writers and researchers from Long Beach Island, New Jersey. 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 owners association then distributes this information to its members via its regular communication methods, e.g., through newsletters; posted on websites, social media.

Questions about the content of Round-Ups and suggestions for topics to be covered in future issues can be directed to RoundUpLBI@gmail.com. The Round Up research and writing team welcomes questions and comments.