



## State of New Jersey

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### MEMORANDUM

TO: Kira Lawrence, Acting Deputy Director for Offshore Wind, New Jersey Board of Public Utilities

FROM: Megan Brunatti, Deputy Chief of Staff  
Katherine Nolan, Environmental Specialist, New Jersey Department of Environmental Protection

DATE: January 3, 2024

SUBJECT: NJDEP Review of 2023 OREC Applications

As the steward of New Jersey's natural resources, the New Jersey Department of Environmental Protection (NJDEP) is tasked with finding the balance of protecting our coastal and aquatic resources on behalf of the citizens of New Jersey, while taking important steps to address climate impacts.

The NJDEP reviewed portions of the OREC applications submitted in response to Solicitation 3 by Atlantic Shores, Community Offshore Wind, Attentive Energy, and Invenergy's Leading Light Wind. The applications were reviewed to ensure that the requirements of the Solicitation Guidance Document were adequately addressed. During the review process, Community Offshore Wind withdrew its application.

As part of the New Jersey Board of Public Utilities (NJBPU)'s first State Agreement Approach (SAA), the NJBPU approved a series of transmission projects that provides a coordinated transmission solution for 6,400 MW of Offshore Wind generation. On October 26, 2022, the NJBPU issued the SAA Order, where it found the Larrabee Tri-Collector Station in Howell, NJ to be the most desirable SAA solution at this time. Each Project submitted in response to Solicitation 3 was required to utilize this SAA solution in addition to a landfall location at the National Guard Training Center in Sea Girt, NJ.

However, in accordance with a BPU decision announced on October 25, 2023, the landfall and onshore route between Sea Girt, NJ and the Larabee Tri-Collector Station will be evaluated as part of the forthcoming NJBPU Prebuild Infrastructure (PBI) Solicitation. The NJBPU envisions the PBI to be a single construction effort to install the necessary Duct Banks and associated access Cable Vaults to house transmission Conduits for future use of up to four (4) OSW projects.

NJDEP notes that as a result of NJBPU's intended PBI Solicitation, the onshore portion of these project applications were not evaluated by NJDEP.

### **Atlantic Shores Offshore, LLC - Project 2**

Atlantic Shores Offshore, LLC is proposing the development of an 84-turbine offshore wind farm, an offshore substation (OSS), and interarray cables within Lease OCS-A 0499. The export cable will travel from the Lease area to the landfall location at Sea Girt, NJ with interconnection proposed at the Larrabee Collector Station. The proposal also includes an O&M Facility in Atlantic City.

### **Fisheries Protection Plan**

Atlantic Shores is actively supporting fisheries research. The developer seems to have an adequate understanding of the important resources in their lease area, however their description of the existing environment and identification of potential impacts was not robust. For instance, there was no discussion of stakeholder concerns, the habitat survey was described as being used to minimize impacts but there wasn't much evidence of this, and there was no mention of prime fishing areas inside the lease and how impacts will be mitigated. Also, there were no specific references to micrositing of turbines to avoid valuable habitat or create space between turbines and artificial reefs.

Atlantic Shores proposed study on "Surfclam Fishing and the Windfarms in the Future Ocean" projected distributions in the year 2055 which would be after the windfarm is decommissioned. Although the NJDEP would support this study, NJDEP would recommend that the study occur a few years during the operation period of the proposed project. The NJDEP would've also liked to see more information about fisheries compensation and their mitigation plan.

The Atlantic Shores' Fisheries Liaison Officer has demonstrated capability in facilitating and open and ongoing dialogue with fishers and communicating issues of the industry back to Atlantic Shores. The application identified a wide variety of research and funding efforts that are being established such as a study on fishing vessel traffic, funding for surfclam fishery enhancement research, sharing information via the Gaia.Hub, and employing fishing vessels for project activities. They've also committed to AIS on every wind turbine which will be beneficial for navigation safety throughout the wind farm.

### Environmental Protection Plan

The Environmental Protection Plan and Fisheries Protection Plan addressed all requirements adequately. Atlantic Shores has thoroughly identified potential impacts and incorporated guidance from key Federal and State agencies (NOAA, BOEM, US FWS, NMFS, NJ DEP, NYSERDA, NJ BPU, etc.), stakeholder groups (ROSA, RWSC), scientists in the Mid-Atlantic and New England region (Rutgers, Stockton, etc.), technology innovators, and NGOs, such as the Wildlife Conservation Society.

Although there may be impacts to threatened and endangered species which would be further evaluated during the project's permitting phase, the application establishes a commitment to fund research projects such as a drone to monitor for marine species, Passive Acoustic Monitoring, Whales for Vessel Safety, Red Knot tagging, bat acoustic monitoring and VEMCO and Motus receivers. The NJDEP would however like to see more of a commitment to Infrastructure Monitoring and felt that there were limited permanent monitoring devices proposed in the water on turbines and cables.

### Artificial Reefs

Although the export cable for Project 2 as currently proposed does not intersect the boundary of an Artificial Reef, the route chosen between the Axel Carson reef and the Manasquan Inlet reef is concerning because of the narrow spacing between the reefs. Atlantic Shores has established a survey corridor between these two reefs that intersect the boundary of the Axel Carson reef. If additional cables are installed within this cable corridor there may be impacts to the reefs in the future. Pursuant to NJDEP's Coastal Zone Management Rules 7:7-9.13, any use, except archeological research, which would significantly adversely affect the usefulness of artificial reefs as a fish habitat is prohibited.

The route proposed by the other applicants is located North of the Manasquan Inlet reef which seems to have more space and limits the opportunity to impact the reefs. The NJDEP strongly prefers a route that travels to the North of the Manasquan Inlet reef.

### Visual Assessment

Atlantic Shores has proposed its windfarm at locations that are as close as 9 miles from shore, which results in increased visual effects on historic properties. Section 106 review is currently underway by the Bureau of Ocean Energy Management (BOEM) and the NJ Historic Preservation Office is participating as a consulting party.

### Permitting

On September 30, 2021, Atlantic Shores voluntarily submitted to the NJDEP a Consistency Certification and a copy of their Construction and Operations Plan (COP). Included in the COP were three projects, Atlantic Shores South Project 1 (NJBPU OREC awarded in June 2021), Atlantic Shores South Project 2, and an O&M Facility located in Atlantic City, New Jersey. As a result, all three projects must be included under one set of NJDEP permits which will include a CAFRA Individual Permit, Waterfront Development Individual Permit (in-water), Coastal

Wetlands permit (likely) and Freshwater Wetlands permits. Permits for all three projects must be submitted and approved before the NJDEP can issue a Federal Consistency Determination which is needed for BOEM to issue the federal agency decision, or COP Approval.

For a project of this size and complexity, the NJDEP permitting timeframe could take a minimum of 9 months and is highly dependent upon the content and completeness of the application submission. Per a Stay Agreement that was executed on May 31, 2023, the decision deadline for the NJDEP's Federal Consistency Determination is January 12, 2024. To date, Atlantic Shores has not submitted a complete permit application to the NJDEP and therefore the NJDEP will not be able to render a decision on the project by the agreed upon date and the federal approval timeline for the combined Projects 1 and 2 may be delayed.

### O&M Facility

Atlantic Shores O&M Facility is located directly adjacent to the Farley State Marina which is owned by the NJDEP. As proposed in the Draft Environmental Impact Statement (DEIS), Atlantic Shores has proposed a parking structure on the Farley State Marina property which the state is currently leasing to Golden Nugget Atlantic City, LLC. In addition to the already existing lease, the Marina area is restricted under the Federal Land and Water Conservation Fund Act of 1964, P. L. 88-578, as amended, due to federal funding that was used to originally construct the marina. Generally speaking, the federal restrictions limit the use of the marina to public outdoor recreation. Private uses, such as a private parking garage, would be considered a "conversion" of parkland from the National Parks Service. The property on which the Marina is located was acquired by the DEP from the City of Atlantic City in 1943 under two deeds. Both deeds require the State of New Jersey to maintain the property as "a harbor of refuge or anchorage area" (such as the present-day marina) and specify that failure to maintain the property for those purposes will cause it to revert back to the City.

It is the NJDEP's understanding that the use of the Farley State Marina is no longer being considered to support the parking needs of the O&M Facility. As alternative sites for parking are identified, the NJDEP should review for impacts to regulated areas and permitting guidance. In addition, the O&M Facility will require a CAFRA Individual Permit as well as a Waterfront Development In-water Individual Permit.

### Environmental Justice

In comparison of the bids, Atlantic Shores Offshore Wind provides more comprehensive details into engagement and outreach plans, which capitalizes on previous existing partnerships with Boys & Girls Clubs of NJ, local academic institutions (Rutgers, Steven Institute, community colleges), and their existing relationship with NJ Veterans Chamber of Commerce. If Atlantic Shores were to be selected, the continuity and centralization of outreach with overburdened communities would be centralized - providing ease for engagement and outreach.

## Attentive Energy Project 2

The proposal includes the development of an offshore wind farm with an OSS, interarray cables, and HVDC converter platform within Lease OCS-A 0538. The export cable will travel from the Lease area to the landfall location at Sea Girt, NJ with interconnection proposed at the Larrabee Collector Station.

### Environmental Protection Plan

The Environmental Protection Plan addressed all requirements exceedingly. Attentive energy includes a thorough description of potential impacts, has made progress engaging with environmental stakeholders, has committed to funding research and data sharing, and has committed to improving habitats. Specifically, they will be investigating the deployment of locally sourced ecological nature-based scour protection alternatives such as eco-concrete. Attentive's Infrastructure Monitoring Plan is well thought out through all stages of development.

### Fisheries Protection Plan

Attentive Energy has done excellent work on their regional coordination and environmental studies planning. Their team seems well informed, well connected and are making good progress in the short time they've had this lease area. NJDEP felt that Attentive Energy's Fisheries Protection Plan exceeded the requirements set forth in the NJBPU's guidance document.

The NJDEP was particularly impressed with Attentive's goal of no net loss of revenue to fishers. They believe that achieving a net positive impact to certain fisheries is possible and have designed a pilot project with associated monitoring to help this goal. They've also committed to a no net loss of biodiversity. Attentive has included an impressive commitment to \$20K per megawatt of funding in excess of the required Regional Monitoring Initiative (RMI) fee which has been earmarked to further support environmental and fisheries research initiatives to help achieve the Project goals. This is a significant contribution and the NJDEP is excited by the research opportunities that may become available as a result.

Attentive Energy has been establishing relationships with research partners, federal and state agencies, and other stakeholders to identify key research topics of interest. They are actively supporting the creation of a regional fisheries' compensatory mitigation program, developed by 11 states and SLOW and intend to participate. They have identified that they will solicit continuous feedback from the fishing and research communities and expect that other stakeholders will continue to inform Project design, planning, and operations in a manner beneficial to all parties.

Lastly, the Fisheries Protection Plan has an excellent description of potential impacts to fisheries, is objectively written, and is clearly well informed by listening to stakeholders. The description of potential impacts is clear, concise, objective, and thorough for all stages of the project through decommissioning, and the Fisheries Protection Plan gives adequate explanation of how those impacts will be addressed.

### NJDEP Permitting

Attentive Energy anticipates their COP submittal to BOEM by Q1 of 2024. The anticipated NJDEP Land Resource Protection permits include a CAFRA Individual Permit, Waterfront Development Individual Permit (in-water), Coastal Wetlands permit (likely), Freshwater Wetlands permits, and a Federal Consistency Certification. The NJDEP looks forward to working with the Attentive Energy team as their COP is finalized and can provide permitting guidance and timeframes as their project is developed.

### Visuals

The Wind Turbine Generators (WTGs) are proposed 42 miles east of Island Beach State Park and at that distance the WTGs would be barely discernable and therefore adverse visual impacts from shore are not anticipated. According to the information provided by Attentive Energy LLC, the tips of the blades would be the only visible part of the turbines, and most of the turbines will be over the horizon and not visible.

### O&M Facility

While the evaluation for the location of the Operation and Maintenance (O&M) facility is continuing, Attentive Energy LLC, is considering the Buckeye Partners Port Reading facility located in Woodbridge Township on the Arthur Kill. The NJDEP would support the use of this site for O&M because it is a filled water's edge site due to prior port development and would appropriately support the water-dependent use associated with operations and maintenance of the Wind Turbine Generators. Development of this site for an O&M facility would require State permits from the New Jersey Department of Environmental Protection, Division of Land Resource Protection. Attentive Energy is also proposing another O&M site in Long Island City, Queens, New York.

The Green Acres funded Alvin Williams Park is located adjacent to the Port Reading waterfront refined products and fuel storage terminal located in Woodbridge Township just to the south. Any impacts to this park would trigger the need for a disposal or diversion of parkland and require prior approval from NJDEP's Office of Transactions and Public Land Administration.

### Environmental Justice

The proposal provided by Attentive positively and compellingly presented on local community engagement in Gloucester, Salem, and Union Counties and included numerous quotes and recommendations from local environmental justice and fisheries leaders and advocates, many of which are Office of Environmental Justice partners and has built strong relationships to forward environmental justice initiatives throughout the State. Attentive also noted that they have already established partnerships with major unions and trade organizations prior to submitting their bid.

### Leading Light Wind

The proposed project includes the development of an offshore wind farm with associated infrastructure within Lease OCS-A 0542. The export cable will travel from the Lease area to the landfall location at Sea Girt, NJ with interconnection proposed at the Larrabee Collector Station.

### Environmental Protection Plan

The Environmental Plan addressed all requirements adequately however the NJDEP felt that their analysis of the impacted resources was cursory and was not as developed as some of the other developers.

The Environmental Protection Plan identified that NJDEP had categorized the benthic environment within their lease area from 2007 through 2009. This is in reference to NJDEP's Ocean/Wind Power Ecological Baseline Studies, for which a benthic mapping survey was conducted. While the study area was large, the benthic mapping survey was located 8 miles off the coast of New Jersey, therefore did not include Leading Light Wind's lease area. The application also identified that NJ artificial reefs can be used for disposal which is not a permitted use pursuant to NJDEP's Coastal Zone Management Rules 7:7-9.13.

Leading Light Wind addressed all requirements of the Data Management and Sharing Plan and had some interesting thoughts on sharing geophysical data. Leading Light Wind commits to advance a formal data sharing agreement with the regional Ocean Observing systems to ensure data standardization best practices and may coordinate with NOAA in the future on regional data sharing.

The NJDEP felt that Leading Light's Infrastructure Monitoring Plan was robust and had great suggestions on the kind of equipment that can be used offshore including hydrodynamics, noise levels, and benthic substrate changes.

### Fisheries Protection Plan

The Fisheries Protection Plan was not as fully developed as some of the other applications. For instance, the potential impacts on fish and on commercial and recreational fisheries was not fully identified, and the application did not address fisheries compensation. NJDEP would've liked to see more funding for monitoring as well as avoidance of prime fishing areas. Specifically, one of the proposed export cable routes goes through a prime fishing area identified as "the Fingers" which was removed from leasing by BOEM because of their value to the fishing industry and stakeholders.

### NJDEP Permitting

Leading Light Wind anticipates their COP submittal to BOEM by Q1 of 2025. The anticipated NJDEP Land Resource Protection permits include a CAFRA Individual Permit, Waterfront Development Individual Permit (in-water), Coastal Wetlands permit (likely), Freshwater Wetlands permits, and a Federal Consistency Certification. In coordinating with the Invenenergy team to date, they have been willing partners and have accepted and implemented feedback given by

the NJDEP. The NJDEP looks forward to working with the Leading Light Wind team as their COP is finalized and can provide further permitting guidance and timeframes as their project is developed.

The permitting discussion in the application recognizes the need for a federal consistency certification. Since offshore wind is an unlisted activity, Invenergy will need to voluntarily submit to the NJDEP's DLRP for the federal consistency certification. Invenergy's acknowledgement of needing the federal consistency certification ensures willingness to submit the request for a federal consistency certification.

### Visuals

The Wind Turbine Generators (WTGs) are proposed approximately 40 miles off the coast of Atlantic City and will not be visible to the naked eye from the shore. If accurate, this will lessen visual impacts to historic properties on land and will provide less concerns from NJ residents on viewshed impacts.

### Environmental Justice

Leading Light Wind discussed good partnerships with trade and union organizations and highlighted partnerships with community-based organizations and local universities to increase workforce training programs. One unique aspect of Leading Light Wind's proposal was their proposed remediation at a brownfield facility in Woodbridge Township and the focus to bring more Offshore Wind conversations to the area where they would expect to build their O&M facility (along with nearby alternate locations in Bayonne and Gibbstown). The Office of Environmental Justice appreciates the effort of Leading Light Wind to bring the clean energy economy to this location but cautions that these areas are overburdened communities and facility operations (including increase in construction diesel truck vehicles) may contribute to increased environmental and public health stressors.

### O&M Facility

Three locations for Invenergy's O&M facilities are proposed in the application. They are the Port Reading facility in Woodbridge Township, New Jersey, the International-Matex Tank Terminal (IMTT) in Bayonne, New Jersey, and the Repauno Port & Rail Terminal in Gibbstown, New Jersey. One of these three (3) locations will be selected for the construction of Invenergy's O&M facilities. The NJDEP's preferred option would be the Buckeye Port Reading facility followed by the IMTT facility is the 2<sup>nd</sup> preferred option, and the Repauno Port & Rail Terminal is the last option.

The Green Acres funded Alvin Williams Park is located adjacent to the Port Reading waterfront refined products and fuel storage terminal located in Woodbridge Township just to the south and there are several smaller Green Acres encumbered park parcels within close proximity of the IMTT in Bayonne. Any impacts to these parks would trigger the need for a disposal or diversion of parkland and require prior approval from the Office of Transactions and Public Land Administration.



## Conclusion

As discussed, in general all of the developers addressed the requirements of the Solicitation Guidance Document and have made great strides towards advancing Governor Murphy's offshore wind goals in New Jersey.

NJDEP was particularly impressed with Attentive Energy's commitment to \$20K per megawatt of funding which is inclusive of the required Research & Monitoring Initiative (RMI) fee and their work on regional coordination and stakeholdering thus far. This is a significant commitment to necessary research. NJDEP has a history of working with the Atlantic Shores team on their first offshore wind project and as a result their application provided a significantly more robust analysis of their lease area and have already established some funding and monitoring efforts. Although Leading Light Wind's Environmental Protection Plan and Fisheries Protection Plan were not as comprehensive as the other proposals, their Infrastructure Monitoring Plan was significantly more robust than the other developers.

NJDEP is committed to protecting the natural resource of New Jersey and looks forward to working with developers with leases off New Jersey's coast as they initiate their federal review process and will have continued discussions on permitting as projects are further designed.