



Opportunities for Public Participation in Offshore Wind Planning in New Jersey

NJ Climate Change Alliance

February 2020

Prepared for the New Jersey Climate Change Alliance

Matthew Campo, Senior Research Specialist, Environmental Analysis & Communications Group, Rutgers, The State University of New Jersey; and Carolyn Iwicki, Rutgers University PhD candidate Ecology and Evolution

This guide provides New Jersey citizens with background information regarding the developing offshore wind energy sector, how to be engaged in that process, and links to additional resources.

WHAT IS OFFSHORE WIND ENERGY?

Offshore wind energy is a form of renewable energy produced when wind and air currents are captured out at sea and converted into electricity. According to the US Energy Information Administration in 2018, natural gas and nuclear power together provided 94% of New Jersey's utility-scale electricity net generation (<https://www.eia.gov/state/?sid=NJ>). Several companies will soon begin to construct wind turbines in the ocean off of New Jersey to meet New Jersey's [energy goal](#) of 7,500 megawatts of offshore wind energy generation by the year 2035.

Offshore wind turbines look like enormous fans, with long blades that spin on top of a tower. The tower can float in the ocean, or developers can attach the tower to the ocean floor. As the wind passes through the turbine blades, the rotation creates the power that will get distributed onshore to NJ for use by residents, businesses, and others in the region.

WHAT ROLE DO STATE AND FEDERAL AGENCIES PLAY IN OFFSHORE WIND DEVELOPMENT OFF THE COAST OF NEW JERSEY?"

The Submerged Lands Act ([43 U.S.C. 1301](#)) defines a line that runs approximately 3 miles off the coast of New Jersey as the boundary between state and federal waters (See Figure 1). Areas of the ocean to the west of the line are controlled by the states, while the federal government manages areas to the east. Current and proposed offshore wind leases for these wind turbines have been awarded in federal waters where wind conditions are more suitable than those closer to shore. There may also be projects under development in the vicinity of the New Jersey coast that deliver power to other states such as New York.

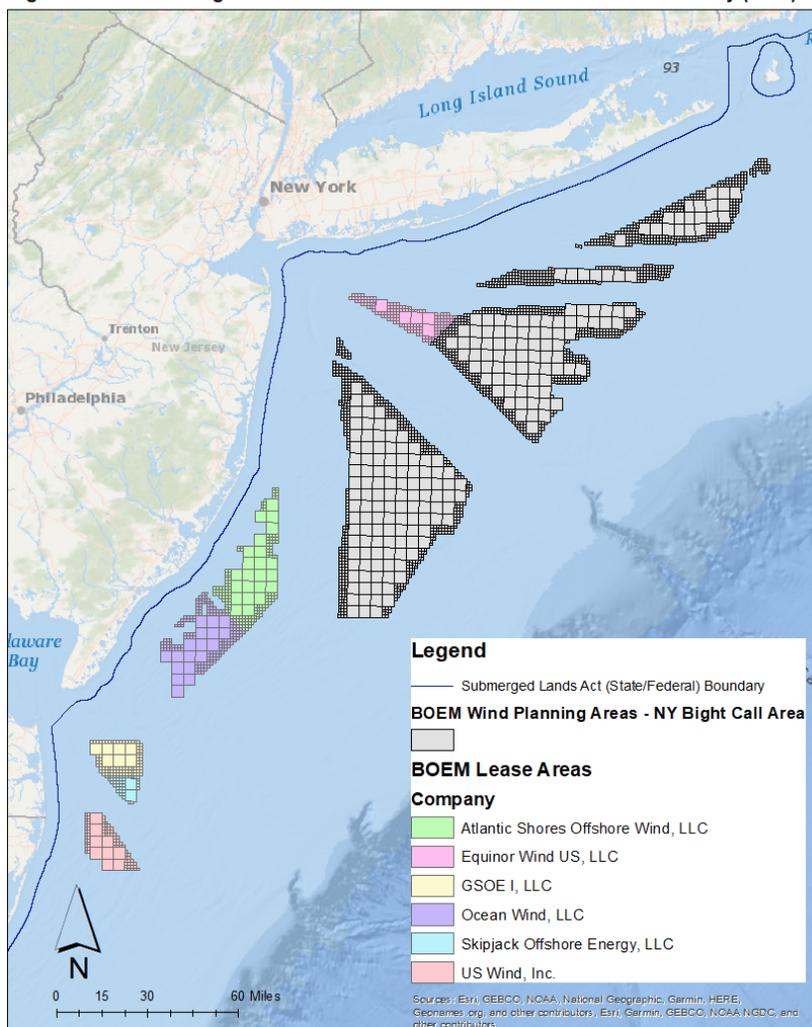
Projects located in federal waters fall primarily under the responsibility of the [Bureau of Offshore Energy Management](#) (BOEM) within the U.S. Department of the Interior, who will manage the development process. However, the state and local communities will get to weigh-in and voice their opinion at several points during the development of wind energy projects. The specific roles of federal, state, and local agencies are described below for each step in the development of an offshore wind project.

WHERE WILL OFFSHORE WIND ENERGY BE LOCATED?

Offshore wind projects are primarily in their planning stages in the federal waters of the Northeast and the Mid-Atlantic United States. Currently, Block Island, RI, is the only operating power-generating offshore wind farm in the United States. Offshore wind project locations in federal waters give BOEM federal oversight over the process to award leases and allow for wind resource development.

- **Wind Planning Areas** are places in the ocean where BOEM is currently investigating opportunities to lease additional areas to developers to construct additional offshore wind projects. BOEM is currently investigating additional wind planning areas for future leasing to offshore wind developers in the [NY Bight Call Area](#) (See Figure 1). When a Wind Planning Area becomes eligible for BOEM to lease, BOEM refers to the area as a Wind Energy Area. After BOEM issues one or more leases within a Wind Energy Area, BOEM uses the term Lease Area to reflect those areas where developers have rights to construct projects.
- **Wind Lease Areas** are areas of the ocean where a wind developer holds a lease from BOEM and is actively investigating and planning to construct an offshore wind project. Off the New Jersey coast, BOEM has already awarded leases to developers (See Figure 1 – BOEM Lease Areas). The wind developers will ultimately determine how much of a lease area is occupied by a given project. For example, the developer may not need to place turbines throughout the entire lease area based on the available technology during development.

Figure 1. Wind Planning Areas and Wind Lease Areas off the Coast of New Jersey (2019)



For up-to-date progress on offshore wind energy development, please visit the [BOEM state projects websites](#) where projects progress through the approval process towards construction. As of January 2020, [Empire Wind](#) (owned by Equinor Wind US, LLC) and [Ocean Wind, LLC](#) (owned by Orsted) are the

two active development projects off the New Jersey coast with energy procurement contracts. Empire Wind is slated to begin delivering power to NY by the mid-2020s. Ocean Wind, LLC was awarded the first Offshore Renewable Energy Certificate (OREC) for New Jersey and has committed to providing 1,100 megawatts of wind power by 2024. [Atlantic Shores Offshore Wind, LLC](#) (a 50/50 Joint Venture between Shell New Energies and EDF Renewables) has yet to be contracted, but is expected to begin delivering power by 2026.

HOW ARE OFFSHORE WIND ENERGY PROJECTS BUILT?

There are five main steps in constructing an offshore wind energy project in the United States:

1. BOEM establishes a Wind Energy Area in the ocean for lease to wind energy developers.
2. BOEM conducts an auction and awards the lease(s) to wind energy developers for portions of the Wind Energy Area.
3. The winning developer conducts a detailed investigation of the lease area and produces a Site Assessment Plan (SAP).
4. The developer produces a Construction and Operations Plan (COP) that details the design of the site, construction operations, and any ongoing operational activities that will occur to operate and maintain the project. The developer often creates the COP concurrently with undertaking various reviews and approvals at the state, the federal and local levels where applicable.
5. Upon BOEM's review and approval of the COP, the developers submit the Facility Design Report (FDR) and the Fabrication and Installation Report (FIR) to BOEM before beginning project construction.

Each of these steps is explained in more detail below, including how citizens can be involved in the process.

STEP 1 – ESTABLISH A WIND ENERGY AREA

As the first step in development, the Bureau of Ocean Energy Management (BOEM) identifies areas that wind energy developers might consider leasing in the future, known as a Wind Planning Area. After developing an initial proposal and a preliminary study of the area, BOEM works with other federal, state, and local agencies and the public to establish and propose Wind Energy Areas where BOEM will conduct leasing activities. BOEM holds public meetings during this process that citizens can attend to learn more about a project and offer their opinions and ideas on the benefits and risks of the proposal. Stakeholders can also comment on the proposal by writing a comment letter to BOEM.

The first opportunity for public engagement occurs when BOEM proposes areas of the ocean where a Wind Energy Area might be established, known as Wind Planning Areas. BOEM seeks public feedback and holds public meetings required under the [National Environmental Policy Act \(NEPA\)](#) for the development of an [Environmental Impact Statement](#) (EIS). At this point in the process, BOEM seeks feedback from consulting federal, state, and local agencies, along with the general public, on whether to make specific areas of the ocean available for development. BOEM must issue a Finding of No Significant Impact (FONSI) in order to allow for the establishment of Wind Energy Areas within the Wind Planning Area.

As BOEM establishes a Wind Energy Area, several other governmental stakeholders consult with BOEM throughout the process:

1. During the NEPA process for establishing a Wind Energy Area, the State of New Jersey Department of Environmental Protection must issue a consistency determination under the [Federal Coastal Zone Management Act](#) (CZMA).
2. Local jurisdictions may attend public meetings or submit comments during the public comment period. However, BOEM is not required to formally consult with local jurisdictions regarding the establishment of Wind Energy Areas.

Citizens can stay involved with a project during the Wind Energy Area establishment phase by:

1. Creating targeted “search” subscriptions for the [Federal Register](#) for federal activities conducted about the establishment and NEPA requirements.
2. Commenting through the online public comment system in the [Federal Register](#) or attending in-person public meetings to provide comments.
3. Monitoring [BOEM Renewable Energy State Activities](#) for public meeting announcements and other stakeholder engagement activities.
4. Joining the [NJBPU Listserve](#) and monitor the [NJBPU Offshore Wind Program](#) websites for public meeting announcements and other stakeholder engagement activities.

STEP 2 – ISSUE LEASE(S) FOR PROJECTS IN THE WIND ENERGY AREA

After BOEM establishes a Wind Energy Area, BOEM issues a proposed sale notice, which is available for public comment, and then a final sale notice that incorporates feedback from public comments and engagement with specific stakeholders in the region. Public comments on the proposed sale notice may include comments on the analysis or information required by BOEM for the bidders to provide as part of their leasing documentation.

Once the final sale notice is issued, BOEM conducts a lease sale auction and awards a lease to the offshore wind project developer. BOEM’s bidding processes for the lease sale auction, as outlined in [30 CFR 585.220](#) and [30 CFR 585.221](#), include using sealed bids, ascending bids, or other multiple-factor bidding processes. The winner of the auction process receives a lease that permits them to develop offshore wind energy within the boundaries of the leased area. Once the developer has the lease, the developer can begin to conduct in-depth investigations of the leased area.

In addition to the BOEM process, several other governmental stakeholders consult with BOEM throughout the Wind Energy Area leasing process:

1. During the leasing process for projects within a Wind Energy Area, the State of New Jersey’s Department of Environmental Protection may be consulted on leasing provisions and may also provide comments on the sale notice and lease provisions during the public comment period.
2. Local jurisdictions may attend public meetings or submit comments during the public comment period. However, BOEM is not required to consult with local jurisdictions when issuing leases.

Citizens can stay involved with a project during the leasing phase by:

1. Creating targeted “search” subscriptions for the [Federal Register](#) for federal leasing activities
2. Commenting through the online public comment system in the [Federal Register](#) or attending in-person public meetings to provide comments
3. Monitoring the [BOEM Renewable Energy State Activities](#) for public meeting announcements and other stakeholder engagement activities
4. Joining the [NJBPU Listserve](#) and monitor the [NJBPU Offshore Wind Program](#) websites for public meeting announcements and other stakeholder engagement activities

STEP 3 – PRODUCE A SITE ASSESSMENT PLAN (SAP) FOR THE LEASE AREA

Once a developer wins a lease, the developer can begin to conduct a site assessment investigations of the lease area that will assist in producing their SAP. The purpose of the SAP is for the developer to characterize the deployment and operations of any observing equipment or operations they will conduct in the lease area to inform the project design. For example, a developer may place observation buoys in the ocean to gather detailed data on wind speed and weather, conduct detailed environmental surveys to understand the ecosystem or conduct seismic testing to understand the characteristics of the ocean floor.

In addition to working with BOEM, the developer will need to consult with other federal and state agencies, and in some instances, as necessary, apply for permits to conduct investigations activities in order to develop the SAP. For example, when conducting lease area environmental investigations, developers must often obtain incidental harassment authorization for marine mammals through the National Marine Fisheries Service (NMFS). When the SAP is complete, BOEM makes the plan available for public comment and holds public meetings to discuss the activities of the wind developer in the lease area. BOEM seeks public feedback and holds public meetings required under the [National Environmental Policy Act \(NEPA\)](#) for the development of an [Environmental Impact Statement](#) (EIS). BOEM must issue a Finding of No Significant Impact (FONSI) before the developer can conduct site assessment activities.

In addition to formal federal public comment and engagement requirements, the developers, coordinating state agencies, and other interested parties may hold discretionary stakeholder engagement activities during the site assessment phase of development. These activities might include informational meetings and other activities designed to gather input and feedback on their development, in addition to building relationships with community members. Citizens may attend these activities and should understand that if they have comments or concerns their input will still be necessary during the formal permitting and environmental consents processes that will follow throughout the project. In other words, private citizens may need to participate in several different types of meetings and provide feedback through several different venues in order that the appropriate parties hear their comments and concerns at the appropriate time in the project.

In addition to the BOEM process, several other governmental stakeholders consult with BOEM prior to site assessment activities:

1. During the NEPA process for conducting a Site Assessment, the New Jersey Department of Environmental Protection must issue a consistency determination under the [Federal Coastal Zone Management Act](#) (CZMA).
2. Local jurisdictions may attend public meetings or submit comments during the public comment period. However, BOEM is not required to formally consult with local jurisdictions regarding site assessment for lease areas.

Citizens can stay involved with a project during the site assessment plan by:

1. Creating targeted “search” subscriptions for the [Federal Register](#) for federal activities related to site assessment or permitting activities.
2. Commenting through the online public comment system in the [Federal Register](#) or attending in-person public meetings to provide comments
3. Monitoring the [BOEM Renewable Energy State Activities](#) for public meeting announcements and other stakeholder engagement activities
4. Watching the [NJDEP Bulletin](#) for permit submissions related to offshore wind activities
5. Joining the [NJBPU Listserve](#) and monitor the [NJBPU Offshore Wind Program](#) websites for public meeting announcements and other stakeholder engagement activities

STEP 4 – PRODUCE A CONSTRUCTION AND OPERATIONS PLAN (COP) FOR A PROJECT WITHIN A LEASE AREA

Once the developer has gathered enough information about the meteorology, bottom characteristics, and other essential aspects of the lease area, the developer begins to create a Construction and Operations Plan. A COP details the design characteristics of the project, as well as how related activities (e.g., labor, transportation, permitting) will operate during the construction and operational phases of wind energy development.

The development of the COP triggers another environmental review process under the [National Environmental Policy Act \(NEPA\)](#) for the development of an [Environmental Impact Statement](#) (EIS). During this phase of the project, there are several public meetings and opportunities for citizens to comment on the scope of the EIS, and then the draft EIS BOEM produces using the project design and operations proposals set forth by the wind developer in the COP. The developer’s permitting activities and consultations during this phase of the project could cause other engagement processes for citizens as part of federal, state, and local permitting reviews and decisions that inform the development of the COP. BOEM must issue a Finding of No Significant Impact (FONSI) before the developer can finalize project designs and begin construction activities.

During the development of the COP, there is a substantive public process and stakeholder engagement period to review the detailed designs, operational plans, expected benefits, and potential negative impacts of the proposed project. During the development of the COP, citizens may participate in the following activities:

1. Scoping meetings held by BOEM to gather feedback on the proposed scope of the [Environmental Impact Statement](#)
2. Public comment period and public meetings to offer feedback on the Draft Environmental Impact Statement

In addition to BOEM’s development of an EIS, several other governmental stakeholders consult with BOEM during the development and approval of the COP:

1. During the NEPA process for evaluating the COP, the New Jersey Department of Environmental Protection must issue a consistency determination under the [Federal Coastal Zone Management Act](#) (CZMA).
2. During the development of the COP, developers will begin to apply for permits from federal and state consulting agencies. Permit processes for federal agencies often require public notification through the [Federal Register](#). Environmental permits in New Jersey appear in the [NJDEP Bulletin](#).
3. Local jurisdictions may attend public meetings or submit comments during the public comment period. However, BOEM is not required to consult with local jurisdictions regarding the COP.
4. Local jurisdictions will interact with offshore wind developers by providing zoning approvals, right-of-way grants for distribution infrastructure, or other local zoning and permitting related activities.

How to stay involved in projects that are at this point in the process:

1. Create targeted “search” subscriptions for the [Federal Register](#) for federal activities related to the COP or permitting activities.
2. Comment on online proposals and comments in the [Federal Register](#)
3. Monitor the [BOEM Renewable Energy State Activities](#) for public meeting announcements and other stakeholder engagement activities
4. Monitor the [NJDEP Bulletin](#) for permit submissions related to offshore wind activities
5. Join the [NJBPU Listserve](#) and monitor the [NJBPU Offshore Wind Program](#) websites for public meeting announcements and other stakeholder engagement activities
6. Visit local town websites to monitor meeting agendas for the “Planning Board” and “Zoning Board.” Meeting agendas are required to be announced and posted under the “Open Public Meetings Act” (NJPL 1975, chapter 231).

STEP 5 – PRODUCE FINAL DESIGN, FABRICATION, AND INSTALLATION REPORTS TO BEGIN PROJECT CONSTRUCTION

Once the COP process is complete, environmental reviews are complete, and relevant federal and state permits awarded, the developer can submit the Facility Design Report (FDR) and the Fabrication and Installation Report (FIR) to BOEM. At this point, there is no public comment on the FDR/FIR documents, but BOEM may raise objections on the final plans in consultation with other agencies and process stakeholders. Once BOEM approves the final FDR and FIR, the developer can begin project construction.

WHAT ELSE IS HAPPENING IN THE AREAS WHERE WIND ENERGY MIGHT DEVELOP?

Many different activities occur on the ocean floor, in ocean waters, on the ocean surface, and above the ocean in the air. Human activities include marine transportation, commercial fishing, recreational fishing, and resource extraction for sand and other minerals. Also, fish, birds, marine mammals, and other species call the ocean environment home. Citizens can learn more about the other users and inhabitants of ocean environments through data portals such as the [Mid-Atlantic Ocean Data Portal](#) or [Oceans Map](#). In addition to learning more about the offshore environment, citizens can use these data tools to identify different areas of conflict or compatibility with existing conditions.

FREQUENTLY ASKED QUESTIONS (FAQ):

1. Where can I find project-specific details and general updates?
 - a. [BOEM Renewable Energy State Activities](#)
2. What information should a Site Assessment Plan (SAP) or a Construction and Operations Plan (COP) include?
 - a. [Guidelines for Information Requirements for a Renewable Energy Site Assessment Plan \(SAP\)](#)
 - b. [Guidelines for Information Requirements for a Renewable Energy Construction and Operations Plan \(COP\)](#)
3. Where can I find more information about the National Environmental Policy Act?
 - a. [A Citizen's Guide to the NEPA](#)
4. Where can I find information about New Jersey's strategy for offshore wind?
 - a. [NJBPU Offshore Wind Program](#)