

+There seems to be both information and mis-information swirling around about the Atlantic Shores Offshore Wind project. In an effort to gather as many facts as possible, JCTA members invited personnel from Atlantic Shores to come talk with us and to answer questions. They did on February 3, 2021. The meeting was transcribed and the answers below, unless otherwise indicated, are directly from that transcript. This FAQ is presented for your information to assist you in making an informed decision about this project.

FREQUENTLY ASKED QUESTIONS

Published DATE

- 1) What is Atlantic Shores Offshore Wind?
- 2) What is Atlantic Shores trying to do?
- 3) Why are windmills being built ten miles from shore? Why can't they be built farther out?
- 4) <u>How many wind turbines will be built?</u> How tall will they be?
- *Will they be visible from shore?*
- *Will commercial fisherman and recreational anglers be able to use the area to fish or to travel through or within?*
- 7) It has been said that residents of Cape Cod and Virginia were successful in pushing planned wind farms further away from their shores. <u>Is that true?</u>
- 8) Will there be cables running through Barnegat Bay or Barnegat Inlet?
- *Where are we in the approval process for this project?*
- 10) If approvals are secured, when would the project start and how long would it take to build?
- 11) Why have there been no public meetings about this project yet?
- **12)** How much will the cost of electrical bills increase for LBI residents and businesses when the wind farm is functioning?

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JOINT COUNCIL OF LBI TAXPAYERS ASSOCIATIONS (JCTA)

BACKGROUND

1) What is Atlantic Shores Offshore Wind?

Atlantic Shores Offshore Wind ("Atlantic Shores") is a joint venture between two companies, Shell Oil and EDF Renewables North America. This joint venture was formed about two years ago when it acquired its lease after going through a federal process to obtain that lease.

The lease area is about 10 – 20 miles off the LBI shore stretching from Atlantic City to Barnegat Light. *Return to the top*

2) What is Atlantic Shores trying to do?

[Note: The following is a one sentence summary provided by the FAQ editor] Hoping to gain approval to build out their lease area with wind turbines to generate electrical power for the state of New Jersey Return to the top

LOCATION

3) Why are windmills being built ten miles from shore? Why can't they be built farther out?

The federal Board of Ocean Energy Management ("BOEM") decides where lease areas should be located and developers, like Atlantic Shores, have to use the leases granted by the federal government.

BOEM analyzes a tremendous amount of data when it makes these decisions. It looks at many factors such as proximity to larger populations, demand for electricity, wind speed, vessel traffic, commercial fishing grounds and water depth. Along with those considerations, one of the other big drivers around this project was the location of the shipping lanes, which is not going to change. Consequently, Atlantic Shore's lease area is wedged between existing shipping and commercial traffic lanes, the latter designated for tugs, barges and large cargo vessels. *Return to the top*

4) How many windmills will be built? How tall will they be?

It depends on how much power the State of New Jersey buys and the size of the turbines that are available when Atlantic Shores starts to build.



How many? Atlantic Shores is hoping to build a wind farm that generates 2300 megawatts of electricity, so applying basic math produces these results [Note: Atlantic Shores provided the formula; the FAQ editor did the math]: If NJ buys the entire 2300 megawatts of power and 10-megawatt turbines were installed in the entire area, there would be about 230 wind turbines. If 12-megawatter turbines were used, there would be about 191. If 14-megawatt turbines were installed, there would be about 164.

Presently, the current technology goes to about 12 – 15 megawatts per turbine. By the time Atlantic Shores gets ready to builds this project, could there be a 20-megawatt machine on the market? No one knows for sure and any statement at this time about the future development of such a turbine is only speculation.

Note that when new turbine technology is available, turbine manufacturers do not continue to manufacture their outdated models. For example, once a manufacturer comes out with a new 12- or 13-megawatt model, they retrofit their manufacturing facility to build their newer model and the old 10-meagwatt machine is no longer available.

How tall? Ørsted, who is building the offshore wind farm to the south of us, is using 12-megawatt turbines, which are 850' tall.

Atlantic Shores' plan is to work with each wind turbine vendor to use the latest and greatest turbine technology available and that does mean larger — and fewer — turbines. "Larger" means the ability to generate more power, not necessarily to be taller. Larger turbines generate more electricity at a faster pace than smaller models, so less larger turbines are needed to produce the same amount of electricity. *Return to the top*

VISABILITY

5) Will the wind turbines be visible from shore?

Yes, sometimes. How visible depends on the time of year, the time of the day and the weather conditions.

The presence or absence of the marine layer — that band of haze that sits out at the horizon — affects visibility. The marine layer appears when there is a difference between the temperature of the water and the temperature of the air. That difference is less pronounced in the early spring and late fall, and thus with little or no marine layer on the horizon, the wind turbines would be more visible. In the summer, when the water is typically cooler that the air, the marine layer is present, which limits the visibility of the windmills.



The Rutgers University Center for Ocean Observing Leadership (RUCOOL) lab continues to work on a visibility analysis from several points off the coast of New Jersey. In addition to the information above, the Rutgers study also found that during the peak summer tourism season, often times by mid-morning through late afternoon, the marine layer forms.

The Rutgers study will be shared as soon as it is finalized. Return to the top

IMPACT

6) Will commercial fisherman and recreational anglers be able to use the area to fish or to travel through or within?

Absolutely. Coast Guard regulations make it is very clear that Atlantic Shoes is not allowed to limit anyone going through. Note that fishermen and anglers can fish right up to the turbines; there is no limit to how close anyone can get to them. Avoid touching or hooking up to the turbines, though, because doing so would be unsafe. *Return to the top*

7) It has been said that residents of Cape Cod and Virginia were successful in pushing planned wind farms further away from their shores. Is that true?

Representatives from Atlantic Shores said they were not aware of any leases that have been officially moved back or had their borders or boundaries moved.

[Note: Subsequent research by a JCTA member revealed that a wind farm off Cape Cod was proposed, but never built. The billionaire Koch Brothers, who own property on Cape Cod, spent \$40 million in legal fees to keep the project tied up in the courts and after sixteen years of legal haggling, the project was abandoned by the developer. Here is the link to The New York Times article describing the situation: https://www.nytimes.com/2017/12/19/us/offshore-cape-wind-farm.html?smid=em-share]

[Note: Subsequent research by a JCTA member produced many articles about the construction of the wind farm off Virginia Beach. None of the articles mentioned any controversy around location, however, nor was there any mention of adjustments to the area's size or borders for any reason.]

8) Will there be cables run through Barnegat Bay or Barnegat Inlet?

No. The cables for this project are buried six feet under the sea floor and will run parallel to the shore from Atlantic County to the Monmouth County area, not come west toward LBI.



Atlantic Shores expects to make landfall in Atlantic County and then further north up in Monmouth County, so there will not be any infrastructure on land on LBI as well as nothing in the bay. The substations in Atlantic and Monmouth counties are inland. Return to the top

PROCESS

9) Where are we in the approval process now for this project to move forward?

State of New Jersey It all boils down to the following: Will the New Jersey Board of Public Utilities buy the project and if so, how much electricity will it purchase? Atlantic Shores participated in the state's procurement process in December 2020 and the award is expected to be announced in late June 2021.

Federal Most of the permitting approval process goes through Board of Ocean Energy Management ("BOEM"). Companies who wish to develop offshore lease areas have to pass BOEM's strict environmental hurdles to do anything within the area. Two submissions are required:

The Site Assessment Plan ("SAP") has been submitted. The SAP shows the BOEM where Atlantic Shores want to put buoys that are going to take meteorological and ocean measurements in the lease area. BOEM is looking to make sure these buoys are not going to disturb anything on the ocean floor. Atlantic Shores is waiting for approval.

The Construction & Operation Plan ("COP") will be submitted in March 2021. This plan essentially states how Atlantic Shores intends to build the wind farm. After the BOEM deems this plan to be complete and sufficient, then BOEM opens up the next round, which is to solicit public comment about the COP. (More about that in response to question #11 below). *Return to the top*

10) If approvals are secured, when would the project start and how long would it take to build?

Atlantic Shores plans to start onshore construction in 2024, i.e., the local fabrication of foundations and wind turbine components and perhaps some of the right-of-way work onshore, and offshore construction in 2025. By the end of the decade, Atlantic Shores expects that the entire lease area would be built and it would remain that way for the duration of the lease, which is up to 30 years.

During the first offshore construction wave, beginning in 2025, foundations would be put in and during the second construction wave, the turbines would be installed. The exact schedule of each "wave" will vary based on the size of project but in most scenarios the



foundations are put in over the course of a few months and the turbines are installed the next year. Once Atlantic Shores receives its permit, it is not allowed to place extra turbines in the lease area. *Return to the top*

11) Why have there been no public meetings about this project yet?

Because Atlantic Shores needs the New Jersey Board of Public Utilities to announce that the state will purchase electrical power from this project; that is expected to happen in June 2021. At that point, when Atlantic Shores knows exactly how much electrical power the state wants to buy, then it can commit to how many windmills it is going to need to fulfill that order and where those windmills need to be placed in the lease area.

Atlantic Shores expects to have its first public open house meeting sometime in July 2021 and at that meeting, it will be able to show renderings of what the project is expected to look like from the shore and other important details.

Besides the public meetings that Atlantic Shores holds, representatives of the federal Board of Ocean Energy Management ("BOEM") come and hold several open house meetings with the community after Atlantic Shores' Construction & Operations Plan ("COP") has been reviewed and deemed sufficient. The BOEM representatives actually come to the communities that would be impacted in both positive and negative ways by this project — although in 2021, they might have to come virtually. These open house meetings provide opportunities for BOEM representatives to gather input and feedback from the communities.

Atlantic Shores expects that the first public comment period will take place in late 2021/early 2022, depending how long it takes BOEM to review the COP. BOEM representatives collect and consider all the input they receive and then tell Atlantic Shores what it can build. *Return to the top*

COST

12) How much will the average electrical bill increase for LBI residents and businesses after the wind farm is functioning?

Atlantic Shores representatives said there would be an increase of a "very small percentage" on the monthly bill. They are aware of the rumor that pegs the increase at \$10 - \$20 per month, and they were clear that this project will not cause that kind of dramatic increase.

The actual amount of the increase depends, however, on the New Jersey Board of Public Utilities. Considering a potential rate increase per bill is a big part of the analysis done by



the NJ Board of Public Utilities, which is responsible for determining that number and making it public.

Note that the meetings of the NJ Board of Public Utilities are public. Its docket is public as well; you can look on the website and see what its meetings are about. You can also watch the meetings on YouTube. *Return to the top*