

Offshore Wind Fact Sheet

Why is offshore wind a good idea? What about other power sources?

- Nuclear power takes about 14.5 years from planning to energy production. Nuclear power also brings safety, affordability, and waste concerns. Jacobson, Stanford U
- Smooth, rounded hills are needed for onshore wind. Delaware's terrain is mostly flat, with low wind speeds. EIA
- We support solar energy, but land space is limited in Delaware, and offshore wind turbines can generate more steady electricity, powering a greater number of homes and businesses than any other renewable energy source.
- Costs of the most recent nuclear reactor in the US has prices that range from \$170-180/MWh



What are some advantages of a clean energy source like offshore wind?

- One 800 MW project would provide 30% of Delaware's electricity.
- Offshore wind will improve human health. Switching from fossil fuel-based energy to renewables reduces the amount of nitrogen dioxide, ozone, and fine particle emissions in the air. A DOE study showed average climate benefits of \$99/MWh and health benefits of \$37/MWh.
- Offshore wind provides new economic opportunities and jobs. 800 MW of power could support up to 9,600 full-time job equivalents, with 960 permanent job equivalents. NREL
- Offshore wind is vital to helping Delaware meet its greenhouse gas emission reduction goals (reduce emissions by 50% by 2030....based on 2005 levels) and reach net zero by 2050.

What does the public think of offshore wind?

- Polling data released in the spring of 2023 showed that 77% of Delawareans think that developing offshore wind projects in Delaware should be encouraged or strongly encouraged. Indep. Polling
- 68% of U.S. coastal residents support offshore wind in a 2024 study. Electrek
- There's been a slight uptick in AirBnB reservations on Block Island following the installation of a 5-turbine wind farm off its shores. New visitors are often "nerd tourists." University of Rhode Island

Costs

- Ratepayers will not pay for the construction of an offshore wind project. They only pay for the electricity generated by the project, either through offshore wind renewable energy credits (ORECs) or through power purchase agreements (PPAs).
- The leveled cost of energy (a measurement used to compare costs of different methods of energy production) for a new offshore wind project is within the average for new projects sourced by other types of energy generation, including coal and nuclear.

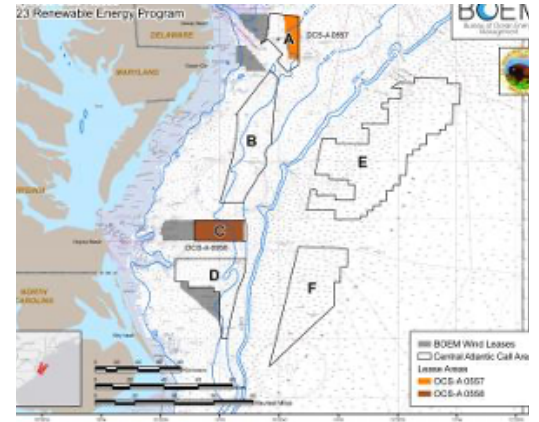
What about environmental concerns?

- "...wind energy can be a powerful factor in protecting the birds that we love." 2/3 of U.S. bird species are threatened with extinction because of climate change. National Audubon Society
- The National Oceanic and Atmospheric Administration (NOAA), BOEM, and the Marine Mammal Commission all say that there is no known relationship between offshore wind activity and whale mortality. They point to shipping vessels and entanglement as the leading causes.
- 95% of a wind turbine can be easily recycled. National Grid Research on the remaining 5% is ongoing. One solution is to use pulverized blades in the manufacture of cement. Veolia

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What's the rush?

- The East Coast's continental shelf will only accommodate a finite number of sites. If Delaware delays, it may have to settle for a site far from its shores; if that happens, jobs and economic development will be less available to Delawareans.
- Neighboring states New Jersey and Maryland have high offshore wind goals (MD 8.5GW, NJ 11GW National Caucus of Environmental Legislators), and developers may choose to bid in those state's solicitations instead of Delaware's.
- If we wait for BOEM to designate sites off the continental shelf, Delaware could pay almost twice as much. (Higher costs are due to distance and the different technology used.) NREL



How the process works

- The Federal Government's Bureau of Ocean Energy Management (BOEM) designates offshore wind sites. Currently, viable sites are on the outer continental shelf.
- Developers obtain sites through an auction run by BOEM.
- Once a developer owns a site, it can bid on a solicitation offered by any state within its grid transmission region... PJM in our case.
- If SB 265 passes, Delaware's State Energy Office (SEO) will design a solicitation process in consultation with the Renewable Energy Taskforce and the Public Service Commission (PSC). Developers will bid in alignment with that solicitation, after which the SEO will review the bids. It may turn down all bids if it finds that its criteria have not been met. Then, contracts will be developed and approved by the PSC. Any energy purchasers will review and agree to the contract, after which the project may commence. The developer would pay all the construction costs, with its profit coming from selling the energy generated by the turbines.



Proposed legislation: SB 265 - The Energy Solutions Act of 2024

- Sets up a procurement process with numerous checks and balances.
- Permits multi-state solicitations to procure power from offshore wind.
- Requires Delaware-only solicitations to range from 800 to 1,200 MW, but our portion of a multi-state solicitation can be lower.
- Permits renewable energy transmission cables to run in the state rights-of-way to provide interconnection to PJM.
- It establishes that no bid will be accepted if it exceeds 110% of the "Benchmark Price." The "Benchmark Price" is the average cost of electricity over the last three years + the average cost of contracted renewable energy/RECs/alternate compliance payments in the previous three years.
- The developer may offer other amenities, provided that the "Benchmark Price" is not exceeded.
- A Delaware Solicitation may include requirements for, without limitation, community benefits and project labor agreements, supply chain requirements, and workforce development

