Town Council 1/25/2024

Mayor Saxton, Council Members and Fellow Citizens:

I'm Doctor John Beauregard 108 Petherton Drive.

Though it's not on the agenda today,  ${\rm An}$  item is on everyone's mind and I want to briefly address it.

I think the Orsted and US Wind projects are a well-intentioned, but ill-conceived threat to the wellbeing of our town and region.

It's been said that the question before you is NOT whether you, or your constituents, are for, or against building the 121- 1000 foot towers - 10.1 miles from the shore, it's whether to accept money the companies are offering, to "benefit the community".... Except, it really isn't. Everyone knows that.

Clearly from the literature that these foreign companies (yes Orsted is from Denmark and US Wind is Italian) - what they are aware of is that getting local leadership to sign a contract to accept the money, not only precludes town opposition to the project, but allows them to tout the town as a "partner" of the project and significantly alters the perceptions of the citizenry to view the project more favorably.

I began researching this issue with an open mind on wind generated power and, like many of you started with the feeling that this is inevitable, so we should accept the windfall (sorry for the pun), to help our budgets. But, In the past few months I have attended multiple presentations in person and virtually. I have then searched references to corroborate or dispel what's been said and employed AI analysis of references, such as the Draft Environmental Impact Statement. My position at this point is that the cost/benefit and risk/ benefit ratios for our town and region are not favorable to justify this project.

A few issues I've become aware of overshadow any benefits and even some of the other drawbacks. The first two have serious implications to National Defense and the safety and effectiveness of Coast Guard Search and rescue operations. I will start the list with these.

## The Project likely:

- 1) Degrades Marine and Aerial Radar
- 2) Generates Excessive Oceanic Noise During Construction and Operation
- 3) Reduces tourism and property values
- 4) Is an Inefficient and expensive means of energy production compared to other options.

- 5) Disrupts the fishing industry.
- 6) Is at Risk for Damage or Destruction by Hurricane or Tornado.
- 7) Risk Hazardous materials spills
- 8) Provides No energy savings to Delaware Residents.
- 9) Causes Electromagnetic Fields with unknown effects to sea life, horseshoe crabs, sharks, migration of fish.
- 10) Provides inadequate bond for decommissioning at end of life.
- 11) Tarnishes us with Industrialized appearing seascape for the rest of most of our lives.

I won't go into details of these items now; I have details and references in my letter and ask it be entered into the record. I ask that when you do vote on the matter, like most of our neighboring towns have or will, you vote against signing any contract or taking money, or if you vote yes, the money be escrowed, as I'm sure a referendum will be called for. Thanks for the opportunity to speak.

## Degradation of Marine and Aerial Radar.

The towers and moving turbines interfere with Radar, both marine and aerial with huge ramifications including national security. If we are attacked by an enemy off the coast detection can be delayed by shadowing of the towers. The towers will endanger our Coast Guard resources when called for rescue in adverse weather conditions. There is no current model for the effect the array has on currents and position prediction. The height of the towers will make locating victims difficult to see at higher than 1000 ft altitude. There are also issues related to offshore training of air operations and issues related to the functioning of the Wallops Island NASA operations. The military has not opposed this, as it is not their place to as it is a political decision to move forward with this. There are many articles about trying to mitigate the vulnerability. National Academy of Sciences has a good reference on it.

## Oceanic Noise During Construction and Turbine Operation

The noise generated by the sonar, pile driving and the sounds transmitted by the turbines via the towers are not without consequence. Acoustic detection and identification of ships and submarines can be degraded. In addition, application for "takes" have been filed which means that there is an admission that there will be serious consequences to marine life. They anticipate loss of whales, dolphins and other sea life. This can be from damage to hearing and inability to navigate and communicate and by vessel strikes by the numerous construction vessels transiting the area.

## Reduction in tourism and property values

The damage to property values and tourism is only uncertain in the amounts. It will, as admitted by everyone, adversely affect DELMARVA tourism except for the few new tourists they estimate will come to see the turbines.

## Inefficient and expensive means of energy production compared to other options.

The estimated production cost of wind generated electricity is 16 cents/kWh. That compares with about 6 cents/kWh that is currently charged in MD. Nature gas and steam turbines produce it at about 3¢ / kWh. This is not an efficient generation source. For reference each reactor at Calvert Cliffs generates about 1 GW, Wildcat Point generates just under 1 GW. Marwind 300 MW, Momentum 800 MW, "Further build-out" (closer to shore 10.1 mi) 600-800 MW.

#### Disruption to fishing industry.

Congressional testimony has been given regarding the expected impact on the fishing industry. There is very little data on the effect positive or negative on fish stocks in the region. There is speculation of improved habitat around the piles. There is speculation that vibration from the turbines will reduce appeal of habitat. Much of the DEIS is speculation.

There is very little data on the effect long term on fish stocks but certainly the areas of the turbines will be unavailable for fishing, and shellfishing industries.

Potential for damage or destruction and hazardous spills by hurricane or tornado.

These turbines are rated up to a Category 2 Hurricane. As lands have been leased all the way up the coast, a category 3 or above hurricane could result in utter destruction of the array, resulting in flying debris and hazardous materials all along the coastline. Lubricant, insulation and fuel spills can occur even in usual weather conditions.

# No energy savings to Delaware Residents.

This project is a Maryland project with energy being brought to Maryland through Delaware seabed and shore. Though Delawareans will be affected by the impacts of the project, the local population will see little to no reduction in power bills.

EMF/Magnetic fields generated - unknown effect to sea life

Electromagnetic Fields generated by the transfer of electricity may affect sea life adversely, potentially interfering with navigation, migration and spawning. It is unknown.

## Inadequate Bond for Decommissioning and Removal at End of Life

The amount of bond set aside for termination by whatever cause may not be adequate. If it is inadequate, the taxpayers will have to foot the bill and the consequences of decommissioning.

### Industrialization of the Seascape.

For the rest of most of our lives we will have a seascape with the appearance of an industrial site, not just to the southeast but also to the northeast.

I provide references below.

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#### References

- 1. The Price Germany Pays for Net Zero, Wall St Journal 01/05/2024
- 2. America's Windfarm Revolution is Broken WSJ 09/07/2023
- 3. Windfall for whom? The evolving notion of 'community' in community benefit provisions from wind farms https://www.sciencedirect.com/science/article/abs/pii/S0016718512001455?via%3Dihub
- 4. Maryland Offshore Wind Draft Environmental Impact Statement
- 5. OceanWind1-Atlantic City DEIS
- 6. Offshore wind farm effects on flounder and gadid dietary habits and condition on the northeastern US coast https://doi.org/10.3354/meps13957
- 7. Offshore Wind Farms Can Interfere with Ship Radar and Navigation, Says New Report National Academy of Sciences Media Advisory | February 22, 2022
- 8. Offshore Wind Turbine Radar Interference Mitigation (WTRIM) Series Technical Interchange Meetings (TIMs)Lillie Ghobrial, DOE Wind Energy Technologies Office July 13, 2020
- 9. Public estimates of support for offshore wind energy False consensus, pluralistic ignorance, and partisan effects Rebecca Sokoloski, Ezra M. Markowitz, David Bidwell <a href="https://doi.org/./j.enpol...">https://doi.org/./j.enpol...</a>
- 10. Wind Turbine Generator Impacts to Marine Vessel Radar (2022) http://nap.nationalacademies.org/26430
- 11. NOAA Fisheries and BOEM Federal Survey Mitigation Strategy Northeast U.S. Region- NOAA Technical Memorandum NMFS-NE-292
- 12. Atlantic Offshore Wind Energy Development: Values and Implications for Recreation and Tourism-OCS Study BOEM 2018-013
- 13. The mayor said so? The impact of local political figures and social norms on local responses to wind energy projects ScienceDirect <a href="https://www.sciencedirect.com/science/article/pii/S0301421523000940">https://www.sciencedirect.com/science/article/pii/S0301421523000940</a> 1/32
- 14. Search and Rescue Operations Near Offshore Wind Energy Projects June 16, 2021 Fiscal Year 2020 Report to Congress
- 15. Faring well in offshore wind power siting? Trust, engagement and process fairness in the United States Jeremy Firestone, Christine Hirt, David Bidwell, Meryl Gardner, Joseph Dwyer <a href="https://www.sciencedirect.com/science/article/pii/S2214629619306553?via%3Dihub">https://www.sciencedirect.com/science/article/pii/S2214629619306553?via%3Dihub</a>
- 16. Methodology for Analyzing the Effects of the Block Island Wind Farm (BIWF) on Rhode Island Recreation and Tourism Activities U.S. Department of the Interior Bureau of Ocean Energy Management 2018-068
- 17. Mitigating the adverse effects of offshore wind farms on air defence radar: concept demonstrations GOV.UK
- 18. Getting to 30 GW by 2030: Visual preferences of coastal residents for offshore wind farms on the US East Coast <a href="https://www.sciencedirect.com/science/article/abs/pii/S0301421522005857?via%3Dihub">https://www.sciencedirect.com/science/article/abs/pii/S0301421522005857?via%3Dihub</a>