Lisa Vest
DNREC Office of the Secretary
89 Kings Highway
Dover, DE 19901

September 9, 2024

Submitted electronically via https://dnrec.delaware.gov/public-hearings/comment-form/

Re: US Wind Project, Docket No. 2024-P-MULTI-0007

Dear Hearing Officer Lisa Vest,

The Sierra Club, on behalf of its thousands of members in Delaware and its thousands more living in Maryland and states projected to benefit from offshore wind developments, Delaware Nature Society, and the Delaware Audubon Society (collectively, "Commenters") submit the following comments on the Required Delaware Permits and Authorizations[1] for the US Wind Project, DNREC Docket No. 2024-P-MULTI-0007.

Commenters believe very strongly that the rapid adoption of clean energy technologies is necessary to confront the climate and public health crises caused by dirty fossil power generation. It is clear that our dependence on fossil energy generation needs to be phased out entirely in order to protect the state's communities, property, and environment from the ever-growing impacts caused by climate change. Delaware in particular has a strong interest in confronting the climate crisis, not least given the extensive coastal areas in Delaware that are increasingly threatened by severe storms and flooding exacerbated by climate change. As such, we support the responsible development of offshore wind in our region.

These comments highlight some recommendations to the Delaware Department of Natural Resources and Environmental Control ("DNREC") concerning the Required Delaware Permits and Authorizations.

[1] *See* https://dnrec.delaware.gov/us-wind/.

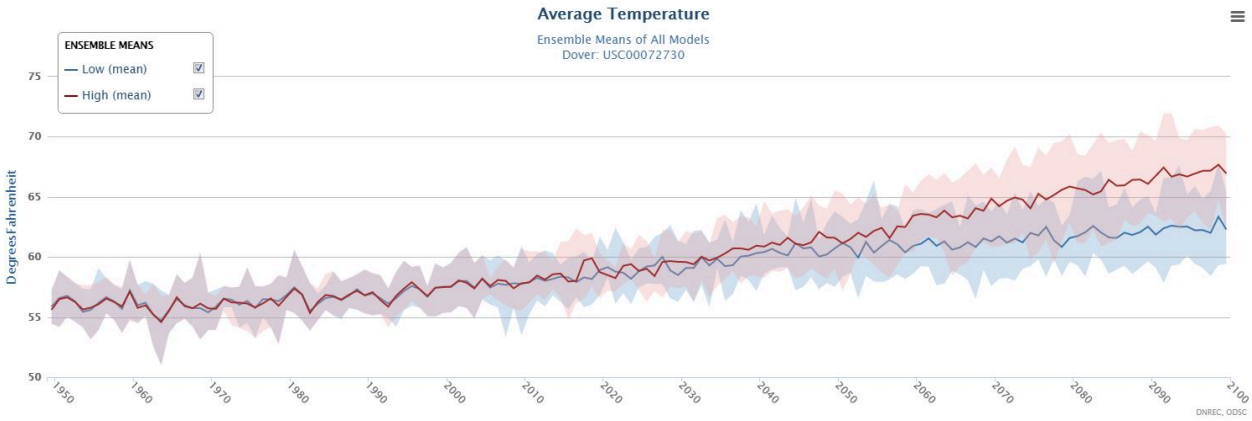
Introduction

Delaware, and indeed the entire world, is in the midst of a climate crisis brought on by excessive combustion of fossil fuels, including fossil sources of electricity. As DNREC notes:

> Climate change is already affecting Delaware. Over the coming years, we can anticipate even worse effects–more days of dangerously high heat, heavier precipitation, and sea level rise that leads to significant flooding.

DNREC, Understanding Climate Change.[2] As such, DNREC recognizes that the "health and quality of life of Delaware's residents" depends on reducing "emissions of greenhouse gases" while "maintaining and improving the state's resilience to the impacts of climate change."[3]

Figure 1: Delaware Climate Projections[4]



A report by the Intergovernmental Panel on Climate Change ("IPCC") underscores the threat posed by the climate crisis, noting that the problem is already dire, and that it is getting worse:

> **Soft limits to some human adaptation have been reached**, but can be overcome by addressing a range of constraints, primarily financial, governance, institutional and policy constraints (high confidence). **Hard limits to adaptation have been reached in some ecosystems** (high confidence). **With increasing global**

[2] "What Do We Know About Climate Change and Delaware?" *at* https://dnrec.delaware.gov/climate-coastal-energy/climate-change/.
[3] DNREC, "Delaware's Climate Impacts," *at* https://dnrec.delaware.gov/climate-plan/impacts/.
[4] *Taken from:* https://dnrec.delaware.gov/climate-coastal-energy/climate-change/.

warming, losses and damages will increase and additional human and natural systems will reach adaptation limits.[5]

Limiting climate change to 1.5 degrees Celsius is necessary to avoid the worst consequences of climate change, as "[a]bove 1.5°C global warming level, some ecosystem-based adaptation measures will lose their effectiveness in providing benefits to people as these ecosystems will reach hard adaptation limits."[6] A rapid reduction in greenhouse gas emissions and transition to a carbon-neutral world is of critical importance, and Commenters as such support the responsible development of renewable energy such as offshore wind.

According to the US Wind Project application materials, the project is poised to "play a critical role in advancing the offshore wind targets set forth by the federal government," and more importantly to "reduce greenhouse gas emissions" while also increasing grid reliability and providing thousands of union jobs.[7] This reduction in greenhouse gas emissions has the potential to be very significant: US Wind anticipates that, when fully developed, the Wind Project "would avoid 139 million short tons of carbon dioxide every year."[8] As such, Commenters support the responsible development of the Project as a means of reducing greenhouse gas emissions and confronting the climate crisis.

Comments

While Commenters remain supportive of offshore wind in general, and are commenting in support of granting the necessary permits for US Wind to be able to complete their onshoring processes, we request that DNREC take into consideration four concerns that the Chapter has with regard to the project, as outlined in the documents made available by US Wind in support of their permit request. Namely, we urge DNREC to ensure that dredge material generated by the project is properly and responsibly disposed of, that cable depth is sufficient to prevent resurfacing issues, that the drilling mud employed does not endanger the local environment with toxins and heavy metals, and that noise and light pollution generated by the project is managed through a reasonable construction schedule that does not include prolonged exposure to light and noise pollution to nearby residents and wildlife in the evening hours.

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[5] Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Climate Change 2022 Impacts, Adaptation and Vulnerability (hereinafter, "IPCC6") at SPM-26-27 (emphasis added), *available at* https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_FinalDraft_FullReport.pdf.
[6] *Id.* at SPM-27 (stated with "high confidence").
[7] US Wind, Maryland Offshore Wind Project DNREC Permit Application (March 2024) at 1-5.
[8] *Id.*

1. Concerns about dredge material disposal

Commenters have concerns about the proposal to landfill all dredged materials from the proposed onshoring processes. While landfilling the material is likely the most economical and easiest pathway to deal with the tons of material that will be accumulated from the project, should the permit be granted, it may not be the most valuable use of the materials. It is for that reason that Commenters request that the Department take into consideration whether there are other higher uses that could repurpose the dredged materials in a safe, responsible manner that would not put an undue burden on the applicant.

2. Concerns about cable depth in the Indian River Waterways

Commenters have concerns about the proposal contained in the US Wind Narrative Document regarding the depth of the cables being buried by way of the jet plow in the Indian River Bay. The narrative states that the burning depth of the cables being jet-plowed through the Indian River Bay will be between 3 and 6 feet. Based on a widespread concern about the volume and random anchoring of recreational boaters in the Bays and the prospect of large-scale sediment movement during increasingly powerful coastal storms, we join other commenters in requesting that the required depth for cable burial in the Indian River Bay be no less than 6 feet, but preferably 7 feet as a way to offer a buffer around the minimum depth needed to ensure containment of the cable in the long term.

3. Concerns about potential contamination of the proposed bentonite-based drilling mud

It is common practice to use bentonite-based drilling mud in the processes of horizontal drilling, and US Wind disclosed in the Narrative Document that this is indeed the practice that US Wind proposes. However, in the past there have been issues with the use of bentonite because it can absorb toxins and heavy metals and transport them to other locations. Bentonite is commonly used in the clean up of oil spills and is known to be well suited for absorbing harmful materials, but this unique characteristic can become a negative property when bentonite is used as a lubricant in the process of horizontal drilling, it becomes contaminated, and it moves contaminants to new locations.

The bentonite may also come into contact with toxins or heavy metals during the drilling process, and so care must be taken in the handling and disposal of the drilling mud during the drilling process. Additionally, regardless of its contamination levels, bentonite dust can cause skin irritation and respiratory issues if humans are exposed in excessive amounts, and, if contaminated with heavy metals, these toxins can lead to poisoning if the bentonite becomes aerosolized after drying. Finally, due to the low lying nature of our state, we have concerns that the containment process of the spent drilling mud and drilled material at the punch in and punch out points for the drilling process, as outlined in the US Wind Narrative Document, may not be sufficient to safeguard from spillage and leakage into the natural environment.

Given the lengthy operating window requested by US Wind in their permit request, the risk that the site will be exposed to potential storm surge, flooding, or exaggerated levels of precipitation is high. Any one of these events could cause a failure in US Wind's containment method, which is intended to ensure that the drilling mud and materials are able to be captured and disposed of properly. This could, in turn, lead to the bentonite mud and drilled material, and any contaminates therein, to leach into the water table or the Indian River waterways, or onto the beach and subsequently into the ocean.

For these reasons, we request that, as a condition of approval of the permits, the Department require the following:

- In-depth tracking of the originating source of bentonite being used by US Wind during the horizontal drilling process, including any companies involved in the processing and handling of the material, as well as the original country of origin;
- Routine testing of the bentonite being used for heavy metals and other toxins known to be harmful to human health or the environment prior to its usage, and doing such testing on each unique batch of product being utilized, regardless of whether or not it comes from the same source or origin; and
- Testing of the drilled materials exposed to the bentonite for the same heavy metals and toxins.

If contaminants are found, then the waste must be handled and disposed of properly and responsibly.

4. Concerns about the duration of noise and light from onshoring activities

One of the primary concerns that has come about in other jurisdictions carrying out onshoring activities for offshore wind cables consists of impacts from light and noise pollution. In Virginia, there have been numerous complaints by residents around the onshoring facilities about the loud nature of drilling and construction activities related to cable onshoring. This has led to poor quality of life for nearby residents and disturbances for local wildlife, and exacerbates an already growing negative view among some of offshore wind. We are particularly concerned about this issue arising in Delaware due to the close proximity of housing to 3Rs beach where the applicant is requesting permission to onshore their project. We want to be sure that we do not repeat these mistakes in Delaware as we try to grow this burgeoning industry in our state.

In the US Wind Narrative Document, US Wind states that it is their intention to request a variance from the city of Bethany Beach to be able to run the horizontal drilling process 24 hours a day until completion. However, they do not state how long the process would take and thus we do not know for how long 24 hour construction would ensue. The document also talks about lighting and details that shielding will be used. However, in other states we have seen that, while

shielding can help reduce local light pollution, it is often ineffective from a distance. We have seen video evidence of onshoring processes in Virginia leading to lighting that is kept on at full power 24/7 for security purposes near construction sites with inadequate shielding to protect nearby houses from having light disturbing them in the evening hours for weeks at a time. Both the noise of 24 hour construction and light pollution from 24 hour minimally shielded lighting have negatively impacted quality of life for both the neighboring residents and for wildlife in the area. There should be a detailed timeline of when evening construction will occur and when it will end, which is not included in the US Wind Narrative Document.

For these reasons, we respectfully request that the Department require, as a condition of approval of the permits, that there must be strict adherence to a reasonable construction schedule that does not include prolonged exposure to light and noise pollution to nearby residents and wildlife in the evening hours.

Conclusion

As detailed in the foregoing, we respectfully request that DNREC move forward with the necessary approvals for the US Wind project, with the modifications and improvements outlined above. We encourage the Secretary to consider the impacts and precedent that the decisions on these permits will set for our state, including our ability to work productively with our neighboring states in the region to move quickly on the necessary regional transmission and clean energy buildout, and on the future of this industry and the many benefits it can provide.

Sincerely,

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