



March 13, 2024

Kirby Rootes-Murdy and Lorena Edenfield  
Office of Renewable Energy Programs  
Bureau of Ocean Energy Management  
U.S. Department of the Interior  
45600 Woodland Road  
Mail Stop VAM-OREP  
Sterling, VA 20166

*Submitted via email*

**Re: Reduction in proposed dredging in Indian River Bay**

Dear Kirby and Lorena,

US Wind, Inc. (US Wind) provides the following reductions and conforming edits to the Construction and Operations Plan (COP) Revision 6 submitted February 19, 2024. After further optimization of the proposed export cable routing through Indian River Bay in Onshore Export Cable South Corridor, US Wind identified reductions of proposed dredging for barge access in a portion of Indian River Bay characterized by the Delaware Department of Natural Resources and Environmental Control (DNREC) as a potentially biologically productive area, specifically for shellfish resources.

By reducing the draft of the proposed cable installation barge, potentially adding a second splice for the export cables, and optimizing installation during certain tidal and weather conditions, dredging for barge access in the eastern portion of Indian River Bay along the export cable corridor would not be necessary.

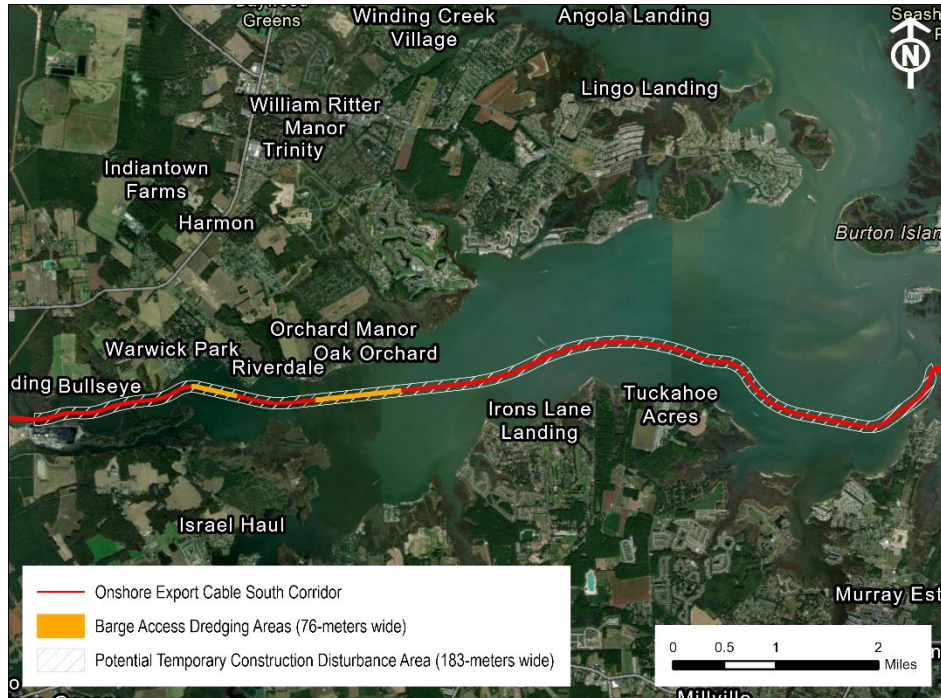
Additionally, US Wind will not include beneficial reuse of dredged material in its DNREC permit applications. While US Wind intends to continue evaluating the potential for wetlands restoration, the material proposed to be dredged would instead be placed in one or more upland disposal facilities (landfills).

Below US Wind describes edits in new text (**bold**) and removed text (~~strikeout~~) to Revision 6 of the COP to reflect the altered plans for cable installation and the disposal of dredged material. Additionally, US Wind proposes updates to time of year restrictions in the nearshore Atlantic cable installation to more accurately reflect DNREC feedback in an Environmental Review letter sent to US Wind on December 21, 2023, provided to the Bureau of Ocean Energy Management (BOEM) on January 19, 2024, in conjunction with a request for information response.

*Volume I*

Edits to COP Volume I to reflect the proposed additional reduction of dredging in Indian River Bay and the upland disposal of dredged materials are shown below:

- Table 2-6, remove “beneficial reuse of dredge material for degraded marsh/wetlands” under South Corridor (preferred) through Indian River Bay/construction adjacent to wetlands.
- Figure 3-13, replace with new figure:



**Figure 3-13. Barge Access Dredging Areas within Indian River Bay**

- Section 3.6.3.1.1
  - Maximum dredging volume reduced from 309,574 cubic yards to **73,676 cubic yards** over two installation campaigns.
  - Update assumed draft of cable lay installation barge:

“The dredging material volumes are preliminary and worst-case. The draft of the vessel is assumed to be **1.5 m (5 ft)**, ~~which, if reduced, would result in significantly less dredging.~~ US Wind continues to work with installation contractors to refine the assumptions based on bay bottom conditions and available vessels. **Cable installation operations would be planned, to the greatest extent practicable, during periods of higher water in the shallow portions of Indian River Bay. Construction operations would be paused during low water conditions. By increasing the size of a cable lay barge to distribute weight of the cable and by accepting downtime during construction, US Wind would avoid the need for dredging for barge access in the shallow, southern portions of Indian River Bay.**”
  - Table 3-4 updated to:

**Table 3-4. Expected Worst Case Dredging Volumes**

<b>Dredging volume</b>	<b>Onshore Export Cable South Corridor (cubic yards)</b>
Campaign 1	30,278
Campaign 2	43,398
<b>Total (2 campaigns)</b>	<b>73,676</b>

- Section 3.6.3.1.2 replaced with:

**Section 3.6.3.1.2 Placement of Dredge Material**

“Dredged material will be piped via temporary dredge pipeline to a dewatering staging area at the US Wind Substations, within the planned limits of construction disturbance. Dredged materials will be dewatered and placed in trucks for disposal/placement at an upland landfill location within 161 km (100 mi) of the US Wind Substations area. Dewatering will be achieved by a passive method using large geobags which would allow dredged material to dewater over approximately 30-60 days prior to removal and placed into dump trucks. Alternatively, mechanical dewatering using a temporary system of separators (shakers), clarifiers, mixing tanks, and belt presses could be sized to meet target daily dredge production and continuously remove material to one or more upland disposal facilities. A combination of passive and mechanical dewatering methods may be used, pending final design.

“US Wind will continue to evaluate the opportunity for beneficial reuse of dredged material at the wetlands around the US Wind Substations site. However, US Wind has not applied for approval of beneficial reuse of dredged material.”

*Volume II*

The updates to COP Volume I above necessitate changes in COP Volume II, as noted below.

- Section 1.3 (maximum disturbance area tables) revise the dredging area as follows:

<b>BOTTOM DISTURBANCE DUE TO DREDGING (Temporary)</b>							
<b>Dredging</b>	<b>Location</b>	<b>Maximum Number of Dredging Locations</b>	<b>Maximum Area of Dredging (m<sup>2</sup>)</b>	<b>Total</b>			
				<b>m<sup>2</sup></b>	<b>ft<sup>2</sup></b>	<b>km<sup>2</sup></b>	<b>acres</b>
Barge Access	Indian River Bay		157,884	157,884	1,699,468	0.16	39.01

- Section 3.2.1 (geology and physical conditions impacts) revise as follows:

“Dredging is anticipated for barge access in the shallow waters of Indian River Bay and to reach the required cable burial depth (see Volume I Section 3.6.3.1.1). ~~Dredged sediments would be beneficially used for habitat restoration projects within Indian River Bay and Indian River to the greatest extent practicable. Areas under consideration for dredged material placement are discussed in Volume I Section 3.6.3.1.2.~~ Dredging

would temporarily displace sediment and would stabilize after the installation of the submarine cables, consistent with the impacts analyzed in COP Appendix II-B3 and discussed in Section 4.2.1.

“Dredging in Indian River Bay is a relatively regular occurrence. Maintenance dredging occurs in portions of Indian River and Indian River Bay to aid navigation, including during the 1990s, 2009, 2010, 2020, and 2022-2023. At the conclusion of the 2013 and 2020 work, dredge material was placed along the shoreline of Delaware Seashore State Park and along the Route 1 highway and bridge, respectively. Additionally, maintenance dredging in Indian River is under consideration, with the material proposed to be used to restore degraded wetlands.

**“Dredging proposed by US Wind would be considered new dredging, although occurring in the vicinity of past dredging projects, and in some cases overlapping potential maintenance dredging of the Indian River federal channel if it occurs in the future in the approved federal channel.”**

- Section 4.1.2 (benefits of reuse of dredged material)

Revision 6: “If the dredged material is placed in an upland disposal site, there is negligible potential for adverse effects based on the results of this analysis.”

Revise to: **“Dredged material placed in an upland disposal site, would result in negligible potential for adverse effects based on the results of this analysis.”**

- Section 4.2.1 (water quality impacts)

Revision 6: “Beneficial reuse of dredge materials at degraded coastal marsh locations within Indian River Bay would be designed to mitigate marsh loss and slow marsh migration. Impacts to water quality during placement would be avoided by using silt fences or silt curtains to interrupt the flow of suspended sediments to improve water quality in adjacent aquatic environments.

Revise to add: **“If dredge materials were approved for beneficial reuse,...”**

- Sec 6.3.1 (Habitat Alteration and Species Avoidance)

**Remove the following paragraphs:**

~~“Dredging is anticipated for barge access in the shallow waters of Indian River Bay and to reach the required cable burial depth. Dredged sediments would be beneficially used for habitat restoration projects within Indian River Bay and Indian River to the greatest extent practicable. Dredged material would be applied by the thin layer placement method. Thin layer placement in marsh locations is characterized by DNREC as a method which “minimizes marsh disturbance and restores the marsh through natural recolonization of vegetation” (DNREC 2023b). The restored areas would assist in shoreline stabilization and the prevention of erosion occurring in sensitive marsh habitats by enabling revegetation of native low and high marsh species and potentially provide nutrients to habitat.~~

~~“No plantings of vegetation are planned for immediately after construction to provide an opportunity for natural revegetation. Recolonization is expected within two to three growing seasons. A Project Monitoring Plan and a Pilot Replanting Plan would be developed to outline long term monitoring and adaptive management measures to facilitate natural recolonization and establishment of vegetation, as well as address issues related to erosion and drainage.~~

~~“Dredge material has been used to restore degraded wetlands in Indian River. In a presentation dated November 17, 2022, DNREC outlined a project to beneficially use dredged material from Indian River channel dredging to restore degraded wetlands in the Town of Millsboro to provide improved wildlife habitat, increase coastal storm and sea level rise resiliency, improve flood risk management and shore protection, and improve the aesthetic beauty of the area. The project would restore approximately 15 acres of degraded marsh and eroded shoreline using engineering controls to place dredged material with minimal environmental impacts. Approximately 5.7 acres of wetland habitat would be restored via marsh platform restoration using dredged material, while approximately 9.4 acres of marsh will be restored via Phragmites treatment. Given the beneficial use of dredged material on wetland restoration, the use of dredge material is not expected to negatively impact the area. US Wind proposes similar beneficial reuse of dredge material in consultation with DNREC.”~~

- Sec 6.3.2 (operations)

Revise Habitat Alteration and Species Benefits subsection to:

**If beneficial reuse of dredge material at degraded marsh sites is later pursued and approved it** would potentially benefit important bird species by increasing habitat space after construction, specifically the black rail, saltmarsh sparrow, American oystercatcher, and colonial waterbirds. ~~No planting is anticipated within the first two years of placement to allow for natural recovery of marsh vegetation. Recovery would be monitored for one year and an adaptive planting plan would be developed after initial monitoring. Monitoring of sediment, elevations, vegetation, fauna, etc. would be conducted annually for five years or until success criteria is achieved.~~

- Section 6.4 (mitigation and monitoring)

Remove the applicant-proposed mitigation measure (and where it appears elsewhere):

~~“US Wind would prioritize beneficial reuse of dredge material (i.e., wetland restoration, beach renourishment), based on the material characteristics and opportunities as they present themselves, over placement in offshore or onshore disposal areas.”~~

- Section 7.2.1 (benthic resource impacts)

Revise Table 7-38 as shown below in the greyed cells:

**Table 7-38. Temporary Estimated Maximum Disturbance**

Disturbance Area	Project Component	Max Area of Disturbance	
		km <sup>2</sup>	acres
Offshore Seafloor	Anchoring	0.06	15.57
	Offshore Export Cable Installation	0.14	34.84
	Inter-array Export Cable Installation	0.15	36.32
	Jack-up Vessels	0.25	62.27
	<b>Total Temporary Offshore Disturbance</b>	<b>0.60</b>	<b>149.00</b>
Onshore Bay Bottom	Onshore export cable installation	1.56	385.48
	HDD Gravity Cell Installation - Barrier Beach Landfall	0.00	1.19
	HDD Gravity Cell Installation -Substation	0.00	0.59
	Dredging for Barge Access	0.16	39.01
	<b>Total Temporary Bay Disturbance</b>	<b>1.72</b>	<b>426.27</b>

- Section 7.3 (mitigation and monitoring)

Revise as follows:

“Cables will be installed using a jet plow to the greatest extent possible. Any dredging needed **at HDD locations** is expected to be limited to the gravity cells.”

- Section 11.2.1 (habitat alteration)

Remove the following paragraph:

~~“Beneficial reuse of dredge materials would enhance marsh habitats by mitigating marsh loss and slowing marsh migration during increased flooding and provide benefits to marsh dependent species at the proposed beneficial reuse locations.”~~

- Section 16.1

Revise Table 16-1 as follows:

BOTTOM DISTURBANCE DUE TO DREDGING (Temporary)							
Dredging	Location	Maximum Number of Dredging Locations	Maximum Area of Dredging (m <sup>2</sup> )	Total			
				m <sup>2</sup>	ft <sup>2</sup>	km <sup>2</sup>	acres
Barge Access	Indian River Bay		157,884	157,884	1,699,468	0.16	39.01

US Wind would like to correct applicant-proposed mitigation measures as related to the time of year restrictions based on feedback from DNREC as follows:

- Volume II Section 1.5 Master Mitigation and Monitoring Summary would be updated to mitigation measures in identified sections of Volume II for consistency.

Remove the following in 1.5 which is superseded by refined time of year restrictions in consultation with DNREC reflected in subsequent applicant-proposed measures:

~~“US Wind assumed all construction within Indian River Bay, including any dredging, would occur in October-March window, observing the general time of year restrictions for summer flounder and other species. Based on consultation with DNREC, this has been extended one month to October 1 through March 31”~~

Revise the following:

“Cables will be installed using a jet plow to the greatest extent possible. Any dredging needed **at HDD locations** is expected to be limited to the gravity cells.”

- Section 4.4:

“Based on feedback from DNREC, US Wind will implement the following time of year restrictions to minimize impacts of sediment disturbance:

- “No in-water work (e.g., cable installation, HDDs, dredging) in Indian River Bay and beach landfall March 1 through September 30.”

**Change to:**

“Based on feedback from DNREC, US Wind will implement the following time of year restrictions to minimize impacts of sediment disturbance:

- No in-water work (e.g., cable installation, HDDs, dredging) in Indian River Bay ~~and beach landfall~~ March 1 through September 30.
- **No HDD in the Atlantic to the beach landfall April 1 through September 15 (inclusive of recreational period avoidance May 15 through September 15).**

- Section 7.2.1:

- “No in-water work (e.g., cable installation, HDDs, dredging) in Indian River Bay and beach landfall March 1 through September 30.
- “No onshore HDD activities or in-water work in Indian River Bay from April 15 through September 30 to avoid impacts to spawning horseshoe crabs.”

**Change to:**

- “No in-water work (e.g., cable installation, HDDs, dredging) in Indian River Bay ~~and beach landfall~~ March 1 through September 30.

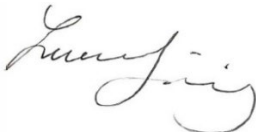
- “No ~~onshore~~ HDD activities **at the Atlantic beach landfall** or ~~in-water work in Indian River Bay~~ from April 15 through September **15 (inclusive of recreational period avoidance May 15 through September 15)** to avoid impacts to spawning horseshoe crabs.”
- Section 7.3:
  - “No in-water work (e.g., cable installation, HDDs, dredging) in Indian River Bay and beach landfall March 1 through September 30.
  - “No onshore HDD activities or in-water work in Indian River Bay from April 15 through September 30 to avoid impacts to spawning horseshoe crabs.”

**Change to:**

- “No in-water work (e.g., cable installation, HDDs, dredging) in Indian River Bay ~~and beach landfall~~ March 1 through September 30.
- “No ~~onshore~~ HDD activities **at the Atlantic beach landfall** or ~~in-water work in Indian River Bay~~ from April 15 through September **15 (inclusive of recreational period avoidance May 15 through September 15)** to avoid impacts to spawning horseshoe crabs.”

US Wind understands that BOEM would provide guidance regarding how to further document the changes described above. Please do not hesitate to contact me regarding any questions or further discussion needed.

Sincerely,



Laurie Jodziewicz  
US Wind, Inc.