Errata for the
Sunrise Wind
Final Environmental Impact Statement

March 20, 2024

Bureau of Ocean Energy Management

Office of Renewable Energy Programs

Errata Overview

The following errata to the Sunrise Wind Final Environmental Impact Statement (FEIS) represent corrections related to technical errors and clarification.

1. FEIS, Chapter 3, Page 3-224 Cumulative Impacts of the No Action Alternative:

Major impacts from impact and vibratory pile driving for NARW under the No Action Alternative ongoing and planned offshore wind energy development were noted in Section 3.11.3.2 of the FEIS.

The corrected section with redline edits now reads:

> Based on the above information, impact pile driving is likely to result in ~~major~~moderate impacts to ~~NARWs and moderate impacts to all other~~ marine mammals through increased risk of PTS and TTS and behavioral impacts. Vibratory pile driving is expected to occur on far fewer days, and, therefore, the total number of days per year at which marine mammals would experience behavioral impacts from vibratory pile driving is very small, and overall impacts would be minor for NARWs and all other marine mammals.

This moderate impact level is consistent with the DEIS analysis and impact definitions and considers that there are no ongoing or planned offshore wind energy projects without mitigation for marine mammals. All projects include measures such as time of year restrictions on pile driving activity, protected species observers monitoring shut-down and clearance zones during pile driving, and requirements for noise attenuation devices. These measures and others required through consultations under the Endangered Species Act and authorizations under the Marine Mammal Protection Act, ensure that major impacts to marine mammals from exposure to pile driving noise are minimized and avoided. Even if auditory or behavioral impacts occur as a result of the no action alternative, impacts to individuals and/or their habitat would not have severe population-level effects and compromise the viability of the species.

2. FEIS, Chapter 2, Page 2-74, Table 2.4-1

Moderate adverse impacts to benthic resources were noted for the No Action alternative in Table 2.4-1.

The corrected section with redline edits now reads:

Table 2.4-1 Summary and Comparison of Impacts among Alternatives with Mitigation Measures

Resource	No Action	Proposed Action	Alternative C-1	Alternative C-2	Alternative C-3	Preferred Alternative
Benthic Resources	*No Action Alternative*: BOEM anticipates	*Proposed Action*: BOEM anticipates	*Alternative C-1*: Impacts to benthic	*Alternative C-2*: Impacts to benthic	*Alternative C-3*: Impacts resulting	*Preferred Alternative (C-3b):*

Resource	No Action	Proposed Action	Alternative C-1	Alternative C-2	Alternative C-3	Preferred Alternative
	that the overall impacts associated with ongoing activities, including permitted offshore wind projects, and environmental trends in the GAA would result in ~~**minor**~~ **moderate** adverse impacts and could potentially include **minor beneficial** impacts on benthic resources due to the artificial reef effect (habitat conversion) *Cumulative Impacts of the No Action Alternative:* BOEM anticipates that future offshore wind activities in	the impacts resulting from the Proposed Action alone would range from negligible to moderate. Therefore, BOEM expects the overall impact on benthic resources from the Proposed Action and ongoing activities to be **moderate**, as the overall effect would be notable, but the resource would be expected to recover completely without remedial or mitigating action. Additionally, **minor beneficial** impacts may result due to the artificial reef effect (habitat conversion	resources would be slightly reduced as a result of the relocation of the 8 WTGs. BOEM expects the overall impact on benthic resources to be similar to the Proposed Action, **moderate** adverse and minor **beneficial**. *Cumulative Impacts of Alternative C-1*: BOEM anticipates that Alternative C-1 and future offshore wind activities in the GAA combined with ongoing activities, reasonably foreseeable environmental trends, and	resources would be slightly reduced as a result of the relocation of the 20 WTGs. BOEM expects the overall impact on benthic resources to be similar to the Proposed Action, **moderate** adverse and minor **beneficial**. *Cumulative Impacts of Alternative C-2*: BOEM anticipates that Alternative C-2 and future offshore wind activities in the GAA combined with ongoing activities, reasonably foreseeable environmental trends, and	from the installation of up to 87 WTG positions could be reduced -as compared to the other action alternatives. The magnitude of this reduction would likely be **minor**. BOEM expects the overall impacts to be similar to the Proposed Action, **moderate** adverse and minor **beneficial**. *Cumulative Impacts of Alternative C-3*: BOEM anticipates that Alternative C-3 and future offshore wind activities in the GAA combined with	Under Alternative C-3b, impacts on benthic resources from onshore construction would be the same as those described for the Proposed Action. Impacts on benthic resources from offshore activities including construction, O&M, and decommissioning would be slightly less under Alternative C-3b compared to the impacts described above for the Proposed Action, Alternative C-1, and Alternative C-2 because of fewer WTGs and reductions in cable length on the sea

Resource	No Action	Proposed Action	Alternative C-1	Alternative C-2	Alternative C-3	Preferred Alternative
	the GAA combined with ongoing activities, reasonably foreseeable environmental trends, and reasonably foreseeable activities other than offshore wind would result in **moderate** adverse cumulative impacts and could potentially include **moderate beneficial** cumulative impacts on benthic resources due to the artificial reef effect (habitat conversion).	to hard bottom). *Cumulative Impacts of the Proposed Action:* BOEM anticipates that the overall impacts associated with the Proposed Action and future offshore wind activities in the GAA combined with ongoing activities, reasonably foreseeable environmental trends, and reasonably foreseeable activities would result in **moderate** adverse cumulative impacts and could potentially include **moderate beneficial** cumulative impacts on	reasonably foreseeable activities would result in **moderate** adverse cumulative impacts and could potentially include **moderate beneficial** cumulative impacts on benthic resources due to the artificial reef effect (habitat conversion).	reasonably foreseeable activities would result in **moderate** adverse cumulative impacts and could potentially include **moderate beneficial** cumulative impacts on benthic resources due to the artificial reef effect (habitat conversion).	ongoing activities, reasonably foreseeable environmental trends, including climate change, and reasonably foreseeable activities would result in **moderate** a dverse cumulative impacts and could potentially include **moderate beneficial** c umulative impacts on benthic resources due to the artificial reef effect (habitat conversion).	floor. These incremental decreases in impacts from Alternative C-3b may have minor beneficial impacts to the OCS habitat overall as compared to the Proposed Action. BOEM expects the overall impact on benthic resources to be similar to the Proposed Action and has characterized them as **moderate** adverse and minor **beneficial**. *Cumulative Impacts of Alternative C-3b*: BOEM anticipates that Alternative C-3b and future offshore

Resource	No Action	Proposed Action	Alternative C-1	Alternative C-2	Alternative C-3	Preferred Alternative
		benthic resources due to the artificial reef effect (habitat conversion).				wind activities in the GAA combined with ongoing activities, reasonably foreseeable environmental trends, including climate change, and reasonably foreseeable activities would result in **moderate** adverse cumulative impacts and could potentially include **moderate** beneficial cumulative impacts on benthic resources due to the artificial reef effect (habitat conversion to hard bottom).

3. FEIS, Locations of "Error! Reference source not found.)"

There are 4 locations in the FEIS (pages 1-5, 2-44, 2-46, 3-84) with “Error! Reference source not found.)”

The corrected sections with redline edits now read:

- Page 1-5 –
  - Figure 1.1-1~~Error! Reference source not found.).~~ (Sunrise Wind Lease Area Assigned from OCS-A 0500 to OCS-A 0487).
- Page 2-44 –
  - Alternative C-1 would result in the exclusion of up to 8 WTG positions from development within the identified Priority Areas ~~(Error! Reference source not found.).~~ (NMFS Priority Areas and WTG Positions Identified for Removal under Alternative C-1).
- Page 2-46 –
  - Alternative C-2 assumes that habitat on the eastern side of the Lease Area is suitable for development and positions for relocation are identified in Potential locations for WTG Relocations under Alternative C-2.~~Error! Reference source not found..~~
- Page 3-84 –
  - Areas for prioritization were identified by NMFS ~~(Error! Reference source not found.)~~ based upon on backscatter data, preliminary data suggesting limited Atlantic cod spawning activity in the area (Figure 3.7-10), assumed hard bottom complex substrate, and the presence of large boulders (Figure 3.7-3) (BOEM 2023).

4. FEIS, Chapter 1, Page 1-5, Table 1.1-1

October 23, 2018 was noted in the 2018 Milestone in Table 1.1-1.

The corrected section with redline edit now reads:

2018	On September 18, 2018, Deepwater Wind New England for commercial Lease OCS-A 0487 pursuant to 30 CFR 585.235(b). On October 24~~23~~, 2018, BOEM approved a 3.5-year extension of the site assessment term, from July 1, 2019, to January 1, 2023.	N/A

5. FEIS, Appendix H, Page H-215, Table H-3

Some of the anticipated enforcing agencies were noted as BOEM in Table H-3 of Appendix H of the FEIS.

The corrected sections with redline edits now read:

10	O&M	Impingement mortality and entrainment	Sunrise Wind would upgrade and/or retrofit the cooling water intake system (CWIS) to a closed-cycle cooling system if the technology becomes available during Project operations	Finfish	~~BOEM~~EPA

			and it is feasible to do so. If it becomes feasible to do so, Sunrise Wind will provide New York State Department of State (NYSDOS) a copy of any National Pollutant Discharge Elimination System (NPDES) Permit Applications and supporting information associated with the CWIS at the time of submittal.		
11	Pre-C, C	Impingement mortality and entrainment	be reduced to below 0.5 feet/second, which is the threshold required for new facilities defined at 40 *CFR* 125.84(c).	Finfish	~~BOEM~~EPA
12	Pre-C, C	Impingement mortality and entrainment	Sunrise Wind would reduce the CWIS water withdrawal, when feasible, during periods of peak egg and larval abundance within the area affected by the OCS–DC.	Finfish	~~BOEM~~EPA
13	C	Proposed boulder relocation plan measure	Prior to inter-array cable corridor preparation pre-cut trenching, cable crossing installation, cable lay and burial) and foundation site preparation (e.g., scour protection installation), Sunrise Wind would provide BOEM with a boulder relocation plan for implementation. The plan would include the following: 1. Identification of areas of active (within last 5 years) bottom trawl fishing, areas where boulders greater than 2 m (7 ft) in diameter are anticipated to occur, and areas where boulders are expected to be relocated for Project purposes. 2. Methods to minimize the quantity of seafloor obstructions from relocated boulders in areas of active bottom trawl fishing, as identified in #1, as technically or economically feasible. 3. Identification of locations of boulders that would be moved and approximately where they would be place, method(s) for moving boulders, and measures to minimize impacts as technically and economically feasible. 4. Outreach conducted regarding the boulder relocation plan (e.g., notifications to mariners).	Commercial and recreational fisheries	BOEM, BSEE, and DOI
14	C, O&M	Monitoring and reporting	Sunrise Wind will share information that is submitted to BOEM relating to cable burial, monitoring, and protection with DOS (submit	Benthic resources	NYSPSC ~~and BOEM~~

			to cr@dos.ny.gov and reference DOS files #F-2021-0798/F-2022-0909) that may be included in the Final Design Report/Fabrication and Installation Report, corrective action plan(s), written notification of certain incidents (e.g., vessel collisions, property damage exceeding $25,000), and other reporting requirements such as in connection with the BOEM COP Approval.		

6. FEIS, Appendix H, Page H-158, Table H-3

The anticipated enforcing agencies under the BOEM-proposed Scenic and Visual Resource Mitigation and Monitoring Measures were noted as BOEM and BSEE in Table H-3.

The corrected sections with redline edits now read:

BOEM-proposed Scenic and Visual Resource Mitigation and Monitoring Measures					
1	C, O&M	Monitoring	to prepare and implement a scenic and visual resource monitoring plan that monitors and compares the visual effects of the wind farm during construction and operations/maintenance (daytime and nighttime) to the findings in the Construction and Operations Plan (COP) Visual Impact Assessment and verifies the accuracy of the visual simulations (photo and video). The monitoring plan should include monitoring and documenting the meteorological influences on actual wind turbine visibility over a duration of time from selected onshore key observation points, as determined by BOEM and the developer. In addition, the developer needs to include monitoring the operation of aircraft detection lighting systems (ADLS) in the monitoring plan. The developer needs to monitor the frequency that the ADLS is operative documenting when (dates and time) the aviation warning lights are in the on position and the duration of each event. Details for monitoring and reporting procedures are to be included in the plan.	Scenic and visual resources	BOEM and BSEE
2	C, O&M	Onshore transmission tower visual	Sunrise Wind shall consider selecting a transmission tower type that has the least amount of visual contrast within the	Scenic and visual resources	~~BOEM, BSEE,~~ NYSPSC

		contrast mitigation	predominate setting where the transmission line is routed. Monopoles typically have a less visual contrast within built environments whereas lattice towers typically have less visual contrast in more natural settings. Consider color-treating the transmission tower to reduce visual contrast darker grays (chemically treated galvanized finishes), or powder-coated with Bureau of Land Management Environmental Color Covert Green or Shadow Gray, or other if these colors do not accomplish the purpose. Bureau of Land Management color samples may be acquired by email to blm_oc_pmds@blm.gov		
3	C, O&M	Onshore substation visual contrast mitigation	Sunrise Wind shall consider treating all select a color that minimizes visual contrast within the surrounding setting and as viewed from outside of the site. Consider using Bureau of Land Management Environmental Color Covert Green or Shadow Gray, or other options if these colors do not accomplish the purpose. Bureau of Land Management color samples may be acquired by email to blm_oc_pmds@blm.gov	Scenic and visual resources	~~BOEM,~~ ~~BSEE,~~ NYSPSC
4	C, O&M	Onshore overhead transmission conductors visual contrast mitigation	Consider using non-specular conductors for overhead transmission powerlines to avoid glare commonly associated with untreated conductors.	Scenic and visual resources	NYSPSC
5	C, O&M	Onshore overhead transmission line Insulator visual contrast mitigation	Consider using polymer insulators to minimize glare commonly associated glass insulators. Use polymer insulators that are a color that minimizes visual contrast with the surrounding setting. Consider using Bureau of Land Management Environmental Color Covert Green or Shadow Gray, or Sudan Brown, or other options if these colors do not accomplish the purpose.	Scenic and visual resources	~~BOEM,~~ ~~BSEE,~~ NYSPSC
6	C, O&M	Onshore facility security fencing visual contrast mitigation	When using galvanized and other types of security fencing, consider treating the fencing to eliminate glare and minimize visual contrast with the surrounding setting. Methods include vinyl-coating, powder-coating, and oxidizing treatments. Colors should be dark grays, black, or dark brown (oxidizing treatments only).	Scenic and visual resources	~~BOEM,~~ ~~BSEE,~~ NYSPSC

7	C, O&M	Onshore and offshore facility and O&M lighting	Incorporate night lighting principles and best management practices that avoid light pollution from artificial light needed for nighttime onshore and offshore construction and O&M activities, as described in the Bureau of Land Management's Technical Note 457 at https://www.blm.gov/sites/default/files/docs/2023-05/IB2023-038_att1.pdf and NPS' Sustainable Outdoor Lighting Principles at https://www.nps.gov/subjects/nightskies/sustainable-outdoor-lighting.htm.	Scenic and visual resources	~~BOEM,~~ ~~BSEE,~~ NYSPSC

7. FEIS, Appendix H, Page H-109, Table H-2

The anticipated enforcing agencies under the NMFS Essential Fish Habitat Conservation Recommendations dated September 14, 2023 in Table H-2 of Appendix H of the FEIS were noted as BOEM (?).

The corrected sections with redline edits now read:

7	Project design	Priority Area 1	To minimize entertainment of eggs and larvae from the cooling water intake system (CWIS), relocate the OCS–DC outside of Priority Area 1 to a position further south and east in the Lease Area. The OCS–DC should be sited as far from documented Atlantic cod spawning activity as feasible and outside sensitive benthic habitat2 associated with Cox Ledge.	Atlantic cod spawning	EPA~~,~~ ~~BOEM (?)~~
8	O&M	OCS-DS	The OCS–DC CWIS should be retrofitted with a closed-cycle cooling system when the technology is made commercially viable. The feasibility of upgrading the proposed CWIS with a closed-cycle cooling system and/or incorporating best available technologies should be evaluated every 5 years upon re-application of the National Pollutant Discharge Elimination System (NPDES) permit for operation of the OCS–DC. This should be included as a condition of COP approval and the NPDES permit.	Atlantic cod spawning	EPA
9	O&M	Monitoring	Ichthyoplankton monitoring at the OCS–DC CWIS should be required for the life of the Project. The ichthyoplankton monitoring should incorporate comments provided in Appendix B into the final NPDES permit. All data and results from the ichthyoplankton and thermal monitoring should be made available	Atlantic cod spawning	EPA~~,~~ ~~BOEM (?)~~

			to NMFS HESD at NMFS.GAR.HESDoffshorewind@noaa.gov.		
10	O&M	Monitoring	To assess impacts to Atlantic cod eggs and larvae, ichthyoplankton monitoring frequency should be increased from quarterly sampling to weekly sampling during peak cod egg and larval presence from December through April of each year.	Atlantic cod spawning	EPA~~,~~ ~~BOEM (?)~~