



16 April 2024

Jolie Harrison, Division Chief
Permits and Conservation Division, Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway, F/PR1 Room 13805
Silver Spring, Maryland 20910

(Submitted via email to Alyssa Clevestine - NOAA Federal
alyssa.clevestine@noaa.gov and Benjamin Laws - NOAA Federal
benjamin.laws@noaa.gov)

**Subject: Incidental Harassment Authorization for Orsted Wind Power North America, LLC Site
Characterization Survey off Delaware (OCS-A 0482 and 0519)**

Dear Ms. Harrison, Ms. Clevestine, and Mr. Laws:

Orsted Wind Power North America, LLC (Orsted) is requesting an incidental harassment authorization (IHA) pursuant to Section 101(a)(5) of the Marine Mammal Protection Act and 50 Code of Federal Regulations § 216 Subpart I to allow for the incidental Level B harassment of small numbers of marine mammals during marine site characterization surveys in coastal waters off of Delaware in the areas of the Bureau of Ocean Energy Management (BOEM) *Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf* (OCS)-A 0482 and 0519 (Lease Areas) (**Figure 1**). Orsted is currently conducting marine site characterization surveys under a re-issued¹ an IHA covering the period from 10 May 2023 to 9 May 2024 (88 *Federal Register* [FR] 30278).

Orsted requests an IHA to perform the same site characterization surveys within the same survey areas as previously authorized by NMFS (88 FR 30278). Per email correspondence with National Oceanic and Atmospheric Administration (NOAA) Fisheries Office of Protected Resources (OPR) staff (personal comm. with Alyssa Clevestine on 12 March 2024), this request initiates an abbreviated notice for a new IHA from your agency, instead of a renewal of the current IHA. A New IHA Request was determined to be appropriate due to the recent availability of updated marine mammal density estimates for the survey areas as published by Roberts et al. (2023). Therefore, density numbers used in this application represent the most recent data available for this region. This data serves as the basis for revised calculations of potential takes by Level B harassment from the operation of certain HRG sound sources. In addition to the incorporation of new density data, the New IHA Request includes updated population estimates published in the Draft U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments for 2023 (NMFS 2024).

¹The previous Incidental Harassment Authorization (IHA) that was effective from May 10, 2022, to May 09, 2023 (87 FR 30182), was re-issued instead of being renewed. This decision was made due to the project not conducting surveys during the initial IHA period; therefore the only change made from the initial IHA was the effective dates.

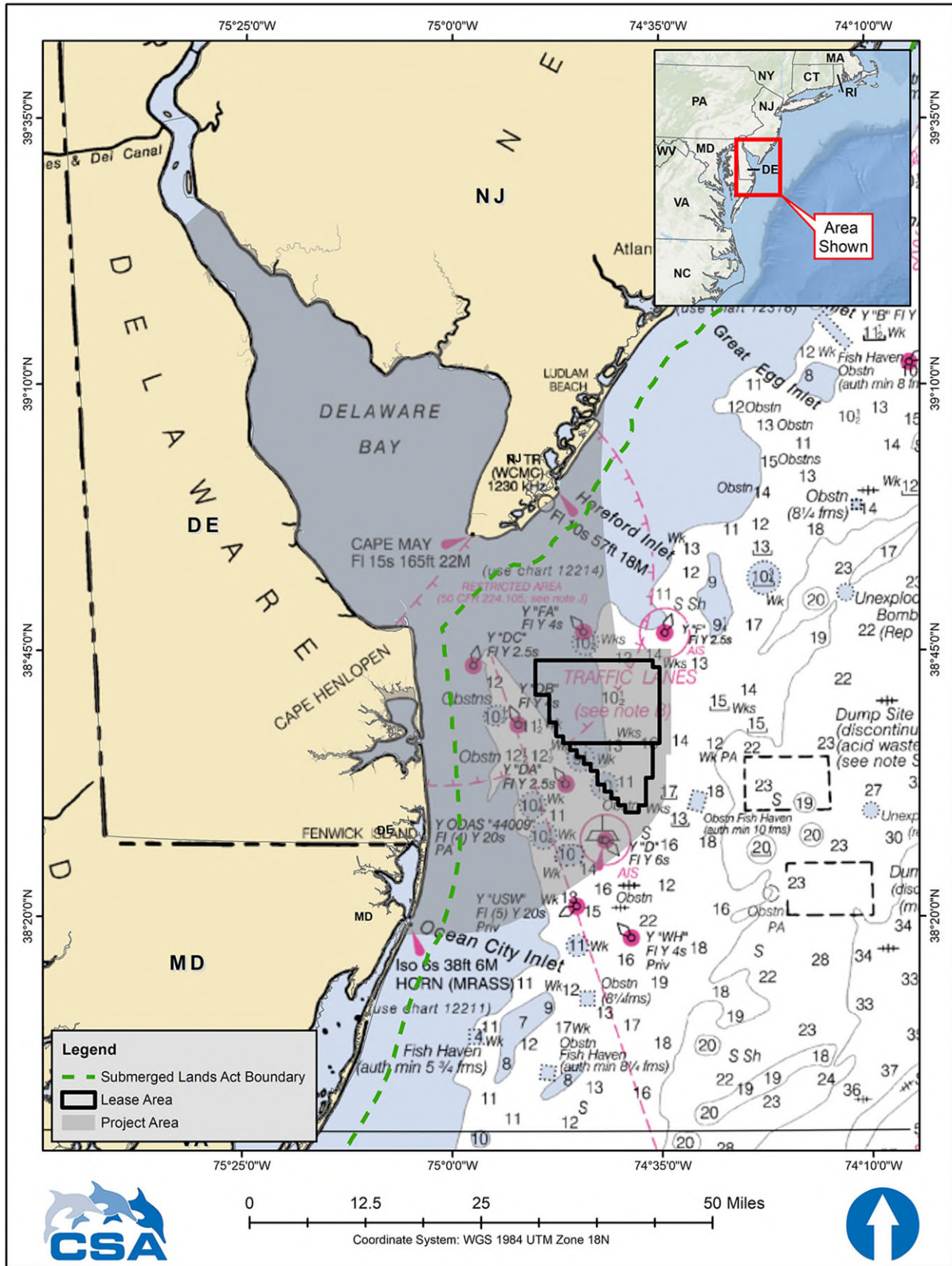


Figure 1. Project Area for the site characterization surveys, indicated in gray, which include the Lease Area outlined in black and the potential ECR area under consideration in this New IHA request.

All proposed activities under this request are identical to those presented in the application for the re-issued IHA (the Original Application; Attachment 1), which was originally filed October 2021 and updated January 2022. **Table 1** provides a summary of activities and a demonstration of no changes between the Original Application and this New IHA Request, as well as references to relevant information from the Original Application.

Table 1. Summary of changes in New Application and Pertinent Information from the Original Application.

Original Application Section	Summary of changes and location of pertinent information from Original Application
1. Description of Specified Activity	The only change to Section 1.1 is an update to the name of the Applicant from Garden State Offshore Energy, LLC and Skipjack Offshore Energy, LLC to Orsted Wind Power North America, LLC (Orsted). The updated name is consistent with both the original issued IHA and the re-issued IHA. Additionally, no changes have been made to the types of equipment or HRG survey activities discussed in Section 1.2 of the Original Application.
2. Dates, Duration, and Specified Geographic Region	The survey period for this New IHA Request has been updated to reflect an effective period of 1 July 2024 to 30 June 2025. Additionally, the overall size of the gray area depicted in Figure 1 above has been provided.
3. Species and Numbers of Marine Mammals	Table 5 has been updated (see Table 2 of this New IHA Request) to reflect population estimates as reported in the 2023 Draft Stock Assessment Reports (NMFS 2024).
4. Affected Species Status and Distribution	Updated population estimates are presented in Table 2 of this New IHA Request and to reflect the 2023 Draft U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments (NMFS 2024).
5. Type of Incidental Take Authorization	No change.
6. Take Estimates for Marine Mammals	There are no changes to Section 6.1.1 or 6.1.3 of the Original Application, but Sections 6.1.2 and 6.2 have been updated to account for the newly published Roberts et al. (2023) density data and any relevant adjustments to the requested take using the Atlantic Marine Assessment Program for Protected Species (AMAPPS) group sizes provided by Clevensine (2024) ² . That information is provided in the following sections and in Table 3 of this New IHA Request.
7. Effects on Marine Mammal Species or Stocks	No change.
8. Minimization of Adverse Effects to Subsistence Uses	No change.
9. Anticipated Impacts on Habitat	No change
10. Anticipated Effects of Habitat Impacts on Marine Mammals	No change.
11. Mitigation Measures	No change. Orsted will follow the same mitigation measures provided in Section 11 of the Original Application, which includes applicable measures from NOAA Fisheries Greater Atlantic Regional Office's (GARFO) programmatic consultation.

² A Clevensine. 2024. Personal Communications. National Marine Fisheries Service Marine Resources Management Specialist, Permits and Conservation Division.

12. Arctic Plan of Cooperation	No change.
13. Monitoring and Reporting	No change.
14. Suggested Means of Coordinated Research	No change.
15. List of Preparers	No change.
16. References	Three citations have been added, one for the 2023 Draft Stock Assessment Report (NMFS 2024), one for the new density data (Roberts et al. 2023), and one for updated stock assessment report from USFWS (2023) for the Florida manatee.

Updates to Section 2 – Survey Period and New IHA Request Effective Period

This New IHA Request will cover all survey activities (using the same scope as previously described in the Original Application) occurring between 1 July 2024 and 30 June 2025. All survey activities will occur within the gray Project Area depicted in **Figure 1** which covers a total area of 4,509.7 km² (inclusive of the Lease Area).

Updates to Section 3 – Species and Numbers of Marine Mammals

Table 2 provides updated population estimates that are presented in Table 5 of the Original Application and supersedes Table 3-1 of the Original Application. These values have been updated to reflect populations estimates reported in the 2023 Draft U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments (NMFS 2024).

Table 2. Marine mammals with geographic ranges that include the Project Area.

Common Name	Scientific Name	Stock	Federal ESA/ MMPA Status ¹	Relative Occurrence in the Region	Best Estimate ¹
Low-frequency Cetaceans					
Fin whale	<i>Balaenoptera physalus</i>	Western North Atlantic	ESA Endangered/ Depleted and Strategic	Regular	6,802
Minke whale	<i>Balaenoptera acutorostrata</i>	Canadian East Coast	Non-strategic	Regular	21,968
Humpback whale	<i>Megaptera novaeangliae</i>	Gulf of Maine	Non-strategic	Common	1,396
North Atlantic right whale	<i>Eubalaena glacialis</i>	Western North Atlantic	ESA Endangered/ Depleted and Strategic	Regular	340
Sei whale	<i>Balaenoptera borealis</i>	Nova Scotia	ESA Endangered/ Depleted and Strategic	Uncommon	6,292
Blue whale	<i>Balaenoptera musculus</i>	Western North Atlantic	ESA Endangered/ Depleted and Strategic	Rare	402
Mid-frequency Cetaceans					

Common Name	Scientific Name	Stock	Federal ESA/ MMPA Status ¹	Relative Occurrence in the Region	Best Estimate ¹
Sperm whale	<i>Physeter macrocephalus</i>	North Atlantic	ESA Endangered/ Depleted and Strategic	Uncommon	5,895
Risso's dolphin	<i>Grampus griseus</i>	Western North Atlantic	Non-strategic	Common	44,067
Long-finned pilot whale	<i>Globicephala melas</i>	Western North Atlantic	Strategic	Common	39,215
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	Western North Atlantic	Strategic	Uncommon	18,726
Atlantic white-sided dolphin	<i>Lagenorhynchus acutus</i>	Western North Atlantic	Non-strategic	Uncommon	93,233
Common dolphin	<i>Delphinus delphis</i>	Western North Atlantic	Non-strategic	Common	93,100
Atlantic spotted dolphin	<i>Stenella frontalis</i>	Western North Atlantic	Non-strategic	Uncommon	31,506
Common bottlenose dolphin ²	<i>Tursiops truncatus</i>	Western North Atlantic, Offshore	Non-strategic	Uncommon	64,587
Common bottlenose dolphin ²	<i>Tursiops truncatus</i>	Western North Atlantic, northern migratory coastal	Strategic	Common	6,639
Dwarf sperm whale	<i>Kogia sima</i>	Western North Atlantic	Non-strategic	Rare	9,474
Pygmy sperm whale	<i>Kogia breviceps</i>	Western North Atlantic	Non-strategic	Rare	9,474
Killer whale	<i>Orcinus orca</i>	Western North Atlantic	Non-strategic	Rare	Unknown
Pygmy killer whale	<i>Feresa attenuata</i>	Western North Atlantic	Non-strategic	Not Expected	Unknown
False killer whale	<i>Pseudorca crassidens</i>	Western North Atlantic	Strategic	Rare	1,298
Northern bottlenose whale	<i>Hyperoodon ampullatus</i>	Western North Atlantic	Non-strategic	Not Expected	Unknown
Cuvier's beaked whale	<i>Ziphius cavirostris</i>	Western North Atlantic	Non-strategic	Rare	2,936
Blainville's beaked whale	<i>Mesoplodon densirostris</i>	Western North Atlantic	Depleted	Rare	2,936
Gervais beaked whale	<i>Mesoplodon europaeus</i>	Western North Atlantic	Depleted	Rare	8,595
Sowerby's beaked whale	<i>Mesoplodon bidens</i>	Western North Atlantic	Depleted	Rare	492
True's beaked whale	<i>Mesoplodon mirus</i>	Western North Atlantic	Depleted	Rare	4,480
Melon-headed whale	<i>Peponocephala electra</i>	Western North Atlantic	Non-strategic	Not Expected	Unknown
White-beaked dolphin	<i>Lagenorhynchus albirostris</i>	Western North Atlantic	Non-strategic	Rare	536,016
Pantropical spotted dolphin	<i>Stenella attenuata</i>	Western North Atlantic	Non-strategic	Rare	2,757
Striped dolphin	<i>Stenella coeruleoalba</i>	Western North Atlantic	Non-strategic	Rare	48,274
Fraser's dolphin	<i>Lagenodelphis hosei</i>	Western North Atlantic	Non-strategic	Rare	Unknown
Rough toothed dolphin	<i>Steno bredanensis</i>	Western North Atlantic	Non-strategic	Rare	Unkown
Clymene dolphin	<i>Stenella clymene</i>	Western North Atlantic	Non-strategic	Not Expected	21,778

Common Name	Scientific Name	Stock	Federal ESA/ MMPA Status ¹	Relative Occurrence in the Region	Best Estimate ¹
Spinner dolphin	<i>Stenella longirostris</i>	Western North Atlantic	Non-strategic	Rare	3,181
High-frequency Cetaceans					
Harbor porpoise	<i>Phocoena phocoena</i>	Gulf of Maine/ Bay of Fundy	Non-strategic	Uncommon	85,765
Phocid Pinniped in Water					
Harbor seal	<i>Phoca vitulina</i>	Western North Atlantic	Non-strategic	Regular	61,336
Gray seal	<i>Halichoerus grypus</i>	Western North Atlantic	Non-strategic	Regular	27,911
Harp seal	<i>Pagophilus groenlandica</i>	Western North Atlantic	Non-strategic	Rare	7,600,000
Hooded seal	<i>Cystophora cristata</i>	Western North Atlantic	Non-strategic	Rare	Unknown
Sirenians					
Florida manatee	<i>Trichechus manatus latirostris</i>	-	ESA Threatened/ Depleted and Strategic	Rare	8,237 ³

¹Best estimate from the most recently published 2023 Draft National Oceanic and Atmospheric Administration Stock Assessment Report (NMFS 2024).

²Common bottlenose dolphins likely to occur in this area belong to two distinct stocks.

³Current minimum population estimate from the 2023 stock assessment report from USFWS (2023).

Updates to Section 6 – Take Estimates for Marine Mammals

Take calculations have been updated to account for new marine mammal density models from Roberts et al. (2023). The survey areas, number of survey days, and equipment have not changed from the information presented in the Original Application. The list of species for which Orsted is requesting take has also not changed. Therefore, changes in take numbers of marine mammals reflected in **Table 3** are a result of updated density modeling published by Roberts et al. (2023) and the updates to abundance estimates in the 2023 Draft U.S. Atlantic and Gulf of Mexico Marine Mammal Stock Assessments 2022 (NMFS 2024). **Table 4** of this New IHA Request supersedes Table 10 of the Original Application. The strategy for calculating take and adjusting take based on group sizes, habitat requirements, and Protected Species Observer (PSO) reports remains as discussed in Section 6.2.3 of the Original Application.

Table 3. Summary of average annual densities and calculated exposures for the proposed survey activities included in this New IHA Request.

Species	Abundance Estimate ¹	Density	Total Calculated Takes	Percent of Population (%)
North Atlantic Right Whale	340	0.0005	4	1.18%
Humpback Whale	1,396	0.0008	5	0.36%
Fin Whale	6,802	0.0008	6	0.09%
Sei Whale	6,292	0.0002	1	0.02%
Minke Whale	21,968	0.0014	10	0.05%
Sperm Whale	5,865	0.0000	0	0.00%
Short-finned Pilot Whale ²	18,726	0.0001	1	0.01%

Species	Abundance Estimate ¹	Density	Total Calculated Takes	Percent of Population (%)
Long-finned Pilot Whale ²	39,215	0.0001	1	0.00%
Common Bottlenose Dolphin (Offshore) ³	64,587	0.5642	4,118	N/A ⁴
Common Bottlenose Dolphin (Migratory) ³	6,639			
Common Dolphin	93,100	0.0142	98	0.11%
Atlantic White-sided Dolphin	93,233	0.0023	16	0.02%
Atlantic Spotted Dolphin	31,506	0.0008	6	0.02%
Risso's Dolphin	44,067	0.0002	1	0.00%
Harbor Porpoise	85,765	0.0096	79	0.09%
Gray Seal ⁵	27,911	0.0017	13	0.05%
Harbor Seal ⁵	61,336	0.0017	13	0.02%

¹ Abundances estimates provided are from the most recent 2023 Draft Stock Assessment Report (NMFS 2024).

² Long- and short-finned pilot whales are difficult to distinguish during shipboard surveys so individual habitat models were not able to be developed. Because both species have the same potential to occur in this region, densities are assumed to apply to both species.

³ While both the offshore and northern migratory coastal common bottlenose dolphin stocks may be present in the Project Area, Roberts et al. (2023) does not provide density estimates for individual stocks. The maximum potential Level B exposures calculated for each stock of common bottlenose dolphin are based on the full survey duration occurring inside or outside the 20-m isobath; however, only a portion of the survey will occur in each area. The exact number of survey days that may occur in each is not currently known, therefore the maximum number of calculated takes (4,118) is assumed to apply to all common bottlenose dolphins potentially present during the proposed survey activities regardless of stock.

⁴ Because takes cannot be applied to individual stocks of bottlenose dolphins, the proportion of each stock taken cannot be calculated.

⁵ Seal species are not separated in the Roberts et al. (2023) data therefore densities were evenly split between the two species.

The requested takes in **Table 4** have been revised for species for which the calculated takes were lower than the estimated group sizes from AMAPPS data (NEFSC 2023) as requested by Clevensine (2024). This revision applies to the following species:

- Sperm whales: No takes were calculated for this species, but based on AMAPPS survey data and their distribution in the U.S. Atlantic (NMFS 2024), there is potential they will occur in the survey area. Therefore, Orsted is requesting a total of 2 takes for this species based on the average group size of 1.68 rounded to the nearest whole number from AMAPPS survey data.
- Pilot whales: Only one take was calculated for the pilot whale species guild based on the Roberts et al. (2023) densities, but based on the distribution of short-finned and long-finned pilot whales (NMFS 2024), it is possible that both species could occur in the Project Area, so Orsted is requesting 8 takes for both short-finned and long-finned pilot whales, rounded from the average group size of 8.2 for long-finned pilot whales presented in AMAPPS survey data.
- Common dolphin: A total of 98 takes were calculated for common dolphins; however, based on available PSO data and the average group size of 30.2 from AMAPPS survey data, it is likely that more individuals could be encountered during the proposed survey activities. Therefore, the requested takes have been increased using the total number of encounters from past PSO reports for this area. The total number of encounters for 2021, 2022, and 2023 were 18, 7, and 5 for common dolphins or unidentified dolphins, respectively, which equates to an average of 10 encounters (Gardline 2021,

2022; AIS 2024). Ten multiplied by an estimated group size of 30.2 equates to a total of 302 takes requested for this species.

- Atlantic spotted dolphins: Only 6 takes were calculated for this species, but based on AMAPPS survey data the average group size is 24.2, which rounded up to the nearest whole number equates to a total of 24 takes Orsted is requesting for this species.
- Risso's dolphins: Only 1 take was calculated for this species, but based on AMAPPS survey data the average group size is 7.28, which rounded up to the nearest whole number equates to a total of 7 takes Orsted is requesting for this species.

Table 4. Summary of average annual densities and calculated exposures for the proposed survey activities included in this New IHA Request.

Species	Issued Take (10 May 2023 – 9 May 2024 using previous iteration of density Data)	Take to Date as of as of 27 October 2023	Total Calculated Takes	Revised Take Request for New IHA based on the most recent density data
North Atlantic Right Whale	11	0	4	4
Humpback Whale	4	0	5	5
Fin Whale	7	0	6	6
Sei Whale	1	0	1	1
Minke Whale	2	0	10	10
Sperm Whale	3	0	0	2 ¹
Short-finned Pilot Whale	N/A	0	1	8 ¹
Long-finned Pilot Whale	20	0	1	8 ¹
Common Bottlenose Dolphin (Offshore) ²	2,752	7	4,118	4,118
Common Bottlenose Dolphin (Migratory) ²				
Common Dolphin	400	0	98	302 ¹
Atlantic White-sided Dolphin	50	0	16	16
Atlantic Spotted Dolphin	15	0	6	24 ¹
Risso's Dolphin	20	0	1	7 ¹
Harbor Porpoise	82	0	79	79
Gray Seal	4	0	13	13
Harbor Seal	4	0	13	13

¹Adjustments to the requested take numbers for the marked species are based on the average group size from AMAPPS survey data (NEFSC 2023) provided by Clevenstine (2024) for species for which the calculated take was lower than the estimated group size, except common dolphins. For common dolphins, the AMAPPS group size was used in conjunction with the number of encounters of common dolphin groups in past PSO reports.

²While both the offshore and northern migratory coastal common bottlenose dolphin stocks may be present in the Project Area, Roberts et al. (2023) does not provide density estimates for individual stocks. The maximum potential Level B exposures calculated for each stock of common bottlenose dolphin are based on the full survey duration occurring inside or outside the 20-m isobath; however, only a portion of the survey will occur in each area. The exact number of survey days

that may occur in each is not currently known, therefore the maximum number of calculated takes is assumed to apply to all common bottlenose dolphins potentially present during the proposed survey activities regardless of stock.

Updates to Section 16 – References

- A.I.S., Inc. (AIS). 2024. Protected Species Monitoring Services During Geophysical Survey of Skipjack Wind Final Report. Incidental Harassment Authorization (IHA; 88 FR 30278) effective May 10, 2023 – May 9, 2024 Prepared for Ørsted Wind Power North America, LLC. January 22, 2024. 34 pp.
- Gardline. 2021. Skipjack Wind Farm (SJW02) 2021 IHA Protected Species Observer Technical Report. Apr-06-2021 to Dec-04-2021. Prepared for Ørsted Wind Power North America LLC. Gardline Report Ref 11571.E00. 73 pp.
- Gardline. 2022. Garden State 2021 IHA Protected Species Observer Technical Report. Jun-14-2-2-21 to May-16-2022. Prepared for Prepared for Ørsted Wind Power North America LLC. Gardline Report Ref 11571.E02. 94 pp.
- National Marine Fisheries Service (NMFS). 2024. Draft 2023 Atlantic Marine Mammal Stock Assessment Report. Accessed 13 March 2024. <https://www.fisheries.noaa.gov/s3/2024-01/Draft-2023-MMSARs-Public-Comment.pdf>.
- Northeast Fisheries Science Center (NEFSC). 2023. Atlantic Marine Assessment Program for Protected Species - Annual Reports. Accessed 4 April 2024. <https://www.fisheries.noaa.gov/resource/publication-database/atlantic-marine-assessment-program-protected-species-annual-reports>.
- Roberts, J.J., T. Yack, and P.N. Halpin. 2023. Habitat-based Marine Mammal Density Models for the U.S. Atlantic: Latest Versions. Available at: <https://seamap.env.duke.edu/models/Duke/EC/>. Accessed 12 February 2024.
- U.S. Fish and Wildlife Service (USFWS). 2023. Stock Assessment Report (SAR) WEST INDIAN MANATEE (Trichechus manatus) FLORIDA STOCK (Florida subspecies, Trichechus manatus latirostris). Accessed 13 March 2024. <https://www.fws.gov/sites/default/files/documents/stock-assessment-report-west-indian-manatee-florida-stock-2023.pdf>.

Ørsted appreciates the opportunity to submit this IHA renewal request. Should you have any questions or need further information, please do not hesitate to contact Matthew Kaplan at matka@orsted.com or (857) 262-2031; or Pilar Patterson at pilpa@orsted.com or (609) 289-1298.

Yours sincerely,
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