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COA Comments RE: Attentive Energy IHA Docket No. RTID 0648-XC805

1 message

Mon, May 22, 2023 at 8:43 PM

To: "ITP.lock@noaa.gov" <ITP.lock@noaa.gov>

Please find attached Clean Ocean Action's comments regarding the Incidental Take Authorization: Attentive Energy LLC Marine Site Characterization Surveys off New Jersey and New York (2023), Docket No. RTID 0648-XC805.

Sincerely,

Kari Martin

Advocacy Campaign Manager

Clean Ocean Action

49 Avenel Boulevard

Long Branch, NJ 07740

(p) 732.872.0111 (f) 732.872.8041

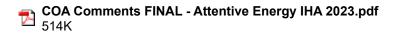
www.CleanOceanAction.org

citizens@cleanoceanaction.org

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Clean Ocean Action



Headquarters:
49 Avenel Blvd
Long Branch, NJ 07740
Telephone (732) 872–0111
Fax (732) 872–8041
info@CleanOceanAction.org
CleanOceanAction.org

Field Office: 18 Hartshorne Dr, Suite 2 Sandy Hook Highlands, NJ, 07732-0505

May 22, 2023

Jolie Harrison, Chief Permits and Conservation Division Office of Protected Resources National Marine Fisheries Service 1315 East-West Highway Silver Spring, MD 20910

RE: Incidental Take Authorization: Attentive Energy LLC Marine Site Characterization Surveys off New Jersey and New York (2023), Docket No. RTID 0648-XC805

Dear Chief Harrison:

Clean Ocean Action ("COA") is a regional, broad-based coalition of conservation, environmental, fishing, boating, diving, student, surfing, women's, business, civic, and community groups with a mission to improve the water quality of the marine waters off the New Jersey/New York coast. COA submits the following comments to the National Oceanic and Atmospheric Administration's ("NOAA") National Marine Fisheries Service ("NMFS") in opposition to the request for an Incidental Harassment Authorization ("IHA") from Attentive Energy, LLC (henceforth, the "Applicant") for marine site characterization surveys for the development of offshore wind ("OSW") energy power plants off the coast of New Jersey and New York.¹

The IHA request, if approved, would authorize the "takes" of marine mammals by "Level B harassment" over the course of one year. According to the Public Notice, "Underwater sound resulting from [the Applicant's] marine site characterization survey activities, specifically [High Resolution Geophysical] surveys, have the potential to result in incidental take of marine mammals in the form of Level B harassment."

From the outset, it is shocking that the NMFS is moving aggressively forward reviewing and issuing IHAs, as well as Incidental Take Regulations ("ITR") and associated Letter of Authorizations ("LOA"), with little to no baseline assessment of marine mammal studies in the region. Indeed, the New Jersey Department of Environmental Protection (NDEP) has just recently authorized a marine mammal monitoring plan for whales. The absence of baseline data will result in the absence of good science. Indeed, NMFS agency officials are also frustrated:

¹ Federal Register Notice, "<u>Takes of Marine Mammals Incidental to Specified Activities</u>; <u>Taking Marine Mammals Incidental to Marine Site Characterization Surveys in the New York Bight, for Attentive Energy</u>," National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce. Published 4/21/2023.

 $^{^2}$ See id.

"'We're building this ship as we're sailing it,' NMFS scientist Andrew Lipsky said last October at a conference on wind power. 'When we don't think through the science, we often get ourselves in trouble.' "3

This current IHA request, if approved, would allow the Applicants to "take" or "harass" **9,086** marine mammals by "Level B Harassment" during the pre-construction activities for an offshore wind power plant. According to the Federal Register notice for the IHA request, the marine mammals included in the proposed take amounts are of **15** different species and include the following endangered species⁴:

• North Atlantic right whale: 12

Fin whale: 38Sei whale:12Sperm whale: 3

Per the Marine Mammal Protection Act ("MMPA"), other federally protected whales in the Applicant's proposed take amounts by Level B harassment include:

• Humpback whales: 24

• Minke whales: 179

• Common bottlenose dolphins (offshore and coastal): 2,135

• Atlantic white-sided dolphins: 207

• Common dolphins: 2,056

• Harbor porpoise: 1,095

• Gray and Harbor seals: 3,192, and

• other protected dolphins and porpoise species.⁵

COA notes that this application to "take" marine mammals is in addition to the Applicant's other current take authorization for preconstruction work issued in 2022, which is still active to date. COA provided comments on this previous IHA request by the Applicant in 2022.⁶ Further, these IHA requests are in addition to those "take" authorizations that would be forthcoming for the Applicant's continued preconstruction activities, as well as for construction, operation and maintenance, and decommissioning.

In addition, there are **14 current "active" take authorizations (IHAs and ITRs)** to harass marine mammals for preconstruction and construction activities for offshore wind power plants on the East Coast. Collectively, these take authorizations are already allowing the harassment of hundreds of thousands of marine mammals. In addition, there are **14 "in process"** authorizations

⁷ See *id*.

³ Sennott, Will and Anastasia Lennon. "Blown Away: Fishermen Endangered by Offshore Wind's Political Power." The New Bedford Light, April 18, 2023, https://www.propublica.org/article/fishermen-endangered-offshore-wind-political-power.

⁴ Federal Register Notice, "<u>Takes of Marine Mammals Incidental to Specified Activities</u>; <u>Taking Marine Mammals Incidental to Marine Site Characterization Surveys in the New York Bight</u>," National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce. Published 4/21/2023. ⁵ See *id*

⁶ National Oceanic & Atmospheric Administration, "Incidental Take Authorizations for Other Energy Activities (Renewable/LNG), as seen 5/22/2023, https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable.

to harass hundreds of thousands of marine mammals on the East Coast for preconstruction and construction activities, many of which have open public comment periods simultaneously.

Indeed, it appears there are no limits for the allowance of incidental take impacts from the current application as well as for the full scope of pending OSW proposals as provided by the NMFS:

By 2030 the Northeast large marine ecosystem will be occupied by over 2.4 million acres of leases, 3,400 turbines, and 10,000 miles of submarine cables; and an additional 5.7 million acres is also under consideration for further development.⁸

It is impossible for marine mammals to adapt to such massive industrial scope and scale of OSW development with each project at minimum causing the excessive impacts described by just one Applicant's project. The activities described in the Applicant's IHA request have been documented to result in species harassment, hence the need for incidental take authorizations.

The mission of the NOAA NMFS Office of Protected Species is "responsible for the protection, conservation, and recovery of more than 160 endangered and threatened marine and anadromous species under the Endangered Species Act. The goal of the ESA is to conserve these species and the ecosystems they depend on." The government is obligated to provide assessments of the potential and real marine ecosystem impacts, and then stipulate policies and regulations to avoid and reduce negative impacts and ensure appropriate and meaningful mitigation of the unavoidable impacts. This also requires, at minimum, a fair, comprehensive, and independently peer-reviewed pilot project for this unproven, large-scale industry in US waters. Indeed, this also requires sound science supported by robust baseline ecological assessments and independent and peer-reviewed studies which are currently planned, only just begun, or underway and incomplete.

Instead, the government is fast-tracking projects, including the Applicant's project. There are numerous Memorandums of Understanding and Memorandums of Agreement between federal agencies to streamline approval of OSW projects. In fact, in early May 2023, the Biden Administration announced a new Memorandum of Understanding. Further, there are several OSW projects in the NY/NJ region designated federal as "Fast-41 projects." However, fast-tracking projects is not protective of marine species. The government's fast-tracking of OSW projects is inconsistent with good governance of public resources, the precautionary principle, and most importantly, laws including the Endangered Species Act ("ESA"). From the outset:

⁹ National Oceanic & Atmospheric Administration, "About Us: Office of Protected Resources," as seen on 12/9/2022, https://www.fisheries.noaa.gov/about/office-protected-resources

⁸ Andy Lipsky, NOAA Fisheries. "Fisheries, Wildlife, and Ecosystem Science in a New Era of Offshore Wind Energy Development." NOAA Ecosystem Based Management and Ecosystem Based-Fisheries Management Seminar Series, March 9, 2022, https://www.youtube.com/watch?v=Dh7yBEDHzL8.

¹⁰ The White House, "FACT SHEET: Biden-Harris Administration Outlines Priorities for Building America's Energy Infrastructure Faster, Safer, and Cleaner," May 10, 2023, https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/10/fact-sheet-biden-harris-administration-outlines-priorities-for-building-americas-energy-infrastructure-faster-safer-and-cleaner/">https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/10/fact-sheet-biden-harris-administration-outlines-priorities-for-building-americas-energy-infrastructure-faster-safer-and-cleaner/

Section 7(a)(2) of the ESA requires BOEM, in consultation with NOAA Fisheries, to ensure that any action the agencies authorize, fund, or carry out is not likely to jeopardize the continued existence of any endangered species or result in the destruction or adverse modification of designated critical habitat; this coordination is accomplished through ESA section 7 consultations. BOEM and NOAA Fisheries are required by the ESA to use the best scientific and commercial data available when carrying out these consultations. 11

It is important to note here that there are <u>no</u> permitting rules for marine site characterization surveying activities. COA finds it shocking and unconscionable that there are no permitting requirements for geological and geophysical surveys under the Bureau of Ocean Energy Management ("BOEM"). The recent BOEM Modernization Rule proposal states:

Although BOEM requires a lessee to submit the results of certain surveys to BOEM in order to obtain approval of its COP, those regulations do not require BOEM's approval of a permit for such surveys. Instead, BOEM has provided guidance on conducting such surveys and also includes terms and conditions in renewable energy leases that require lessees to submit survey plans to BOEM for review in advance of their survey activities. BOEM's review of the plans, while not an approval process, does provide BOEM an opportunity to communicate with lessees to ensure the lessees' survey results will meet BOEM's information needs and to ensure certain environmental conditions are met in conducting the surveys. ¹²

Given this, it raises more questions about how it was possible that BOEM asserts without question that there is absolutely "no evidence" that offshore wind activities have any connection to the unprecedented number of dead whales that continued to wash-up on beaches in the NY/NJ region since December 2022. It is now clear there are no regulations; there are no "rules of the road" regarding survey work. Without such regulations, how can BOEM possibly make such a claim? Is the only requirement for survey vessels currently under the Marine Mammal Protection Act ("MMPA") requiring IHA authorizations, which are limited in scope? In the Proposed Modernization Rule, BOEM admits not having the regulatory authority to govern surveys: "BOEM's existing renewable energy regulations do not expressly govern survey activities."¹³

Further, regarding impacts to marine life from offshore wind development, NOAA Fisheries assumes the success of mitigation measures for impacts from offshore wind development. Before mitigation is considered, avoidance and minimization are required. However, without baseline studies and a pilot project to determine impacts, how can mitigation measures be established? This massive cumulative impact of multiple projects by a nascent US industry has not been

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¹¹ NOAA Fisheries, "Section 7: Types of Endangered Species Act Consultations in the Greater Atlantic Region," as seen 4/30/2023, https://www.fisheries.noaa.gov/insight/section-7-types-endangered-species-act-consultations-greater-atlantic-region.

¹² Federal Register, "Renewable Energy Modernization Rule," Bureau of Ocean Energy Management, Publication Date: 1/30/2023, https://www.federalregister.gov/documents/2023/01/30/2023-00668/renewable-energy-modernization-rule.

¹³ See id.

assessed, and as described above has no precedence or permitting system. What is this mitigation strategy based on? What if mitigation measures fail? Since there is no transparent, consistent publicly available real-time assessment and reporting activities, how will NMFS even know? How are you judging if mitigation measures are enough to prevent harassment to marine mammals during the survey work? What are the ecological guardrails? How and when would it be determined that additional harassment is occurring, and work must stop?

In sum, COA requests that NMFS deny this IHA request because:

- 1. there are no permitting requirements for geological and geophysical surveys under the Bureau of Ocean Energy Management ("BOEM").
- 2. it is an incomplete evaluation due to the lack of new information and new protection strategies under development by federal agencies, particularly for the critically endangered North Atlantic right whale ("NARW").
- 3. it would allow thousands of Level B takes of endangered, threatened, and/or protected marine mammal species, including the NARW, which will have significant and more than "negligible" impacts on a species on the precipice of extinction.
- 4. it will unacceptably add impacts to the already detrimental cumulative impacts of the numerous take authorizations and requests from the Applicant's' previous activities and projects in the region, as well as those requests and authorizations for other offshore wind industry companies' previous, current, and forthcoming take authorizations for preconstruction, construction, operation, and decommissioning of OSW facilities,
- 5. it raises other issues of importance, including lack of fairness, transparency, and accountability; and
- 6. it fails to address the cumulative impacts and effects of previous and concurrent preconstruction surveys and construction activities in the region.
- 7. an independent assessment is needed to determine if the unprecedented geotechnical and geophysical activities may be linked to the spike of whale and dolphin strandings in the region of the offshore wind project.

It is unacceptable and harmful to marine resources, to be moving forward with incidental take authorizations at the current scope and scale of OSW energy development without sound science, transparency, due diligence, and meaningful public engagement. Clean Ocean Action urges NMFS to reject the Applicant's IHA request for the construction of an offshore wind power plant for the reasons outlined below in these comments.

I. Deny and Rescind the IHA request, as well as other "in process" take authorization requests, due to the: A.) Five-Year Strategy to protect NARW under development, B.) Lack of basic research about impacts to large whales, C.) Unprecedented number of whale deaths occurring in a short period of time along the NJ/NY coast starting in December 2022.

A. Five-Year Strategy to Protect NARW is Under Development

The Bureau of Ocean Energy Management ("BOEM") and NOAA Fisheries' "Draft North Atlantic Right Whale and Offshore Wind Strategy" (hereafter "Draft Strategy") was proposed for

public review but has not yet been finalized. This five-year protection plan for the North Atlantic right whale ("NARW"), while flawed and incomplete, is currently under development and stipulates the dire status of the NARW and need for additional protection. To ensure the best chance of survival, incidental take authorizations for the Applicant must be halted until the strategy is complete and measures to avoid, minimize or eliminate harm are determined so they can be applied to these projects.

The NARW is one of the most critically endangered species. Based on the population status, the outlook for the survival of the NARW is grim, especially with new threats, including offshore wind energy development. The NMFS' last five-year review of the NARW, published in 2017, notes that the species' population grew from 270 to 483 whales between 1990 and 2010; but the number of individuals remaining declined to 440-458 by 2017. The 2017 five-year review further notes that NMFS declared an unusual mortality event ("UME") under the Marine Mammal Protection Act ("MMPA") in August 2017 after 15 known NARW deaths occurred within a four-month span. The NARW population has continued to decline. In October 2021, the North Atlantic Right Whale Consortium announced that just 336 individual NARWs remain. The Draft Strategy affirms this dire status in Section 2.3 where it states:

"The potential biological removal (PBR) level for the species, defined as the maximum number of animals that can be removed annually while allowing the stock to reach or maintain its optimal sustainable population level, **is less than 1** (Hayes et al. 2022)." ¹⁶ (Emphasis added)

To be clear, <u>not one</u> of the remaining NARW can be lost, an unambiguous and stern statement. It goes on to state: "The species has low genetic diversity, as would be expected based on its low abundance, and the species' resilience to future perturbations is expected to be very low (Hayes et al. 2018)." ¹⁷ This information suggests that harassment can have population impacts and must be avoided or significantly reduced to protect the NARW population. It is possible that "perturbations" from surveying and vessel activities would likely trigger Level A & Level B Harassment impacts to the NARW. Yet, the proposed IHA does not list Level A impacts to the NARW. Based on this, for the protection of the NARW, all industrial full-scale construction for offshore wind energy should be paused until the federal agencies determine how best to eliminate or avoid all impacts, Level A or B, on the NARW.

¹⁴ North Atlantic Right Whale (Eubalaena glacialis) 5-year Review: Summary and Evaluation, NATL. MARINE FISHERIES SERV. GREATER ATLANTIC REGIONAL FISHERIES OFFICE (2017), https://www.fisheries.noaa.gov/resource/document/5-year-review-north-atlantic-right-whale-eubalaena-glacialis [hereafter "2017 5-Year Review"].

¹⁵ H.M. Pettis, et al., North Atlantic Right Whale Consortium 2021 Annual Report Card: Report to the North Atlantic Right Whale Consortium (2022), https://www.narwc.org/uploads/1/1/6/6/116623219/2021report_cardfinal.pdf.

¹⁶ U.S. Department of Interior Bureau of Ocean Energy Management and U.S. Department of Commerce National Oceanic and Atmospheric Administration NOAA Fisheries, *Draft BOEM and NOAA Fisheries North Atlantic Right Whale and Offshore Wind Strategy*. October 2022, page 5.

¹⁷ See id.

B. Lack of Basic Research About Impacts to Large Whales

In addition, there is a lack of basic research of the impacts of OSW energy development on large whale species in U.S. waters, particularly in the mid-Atlantic region. It is reckless to move forward without the scientific baseline assessments for what harm may or could occur to whales before issuing any permits and authorizations, including IHAs, ITRs, and associated LOAs.

1. Failure to include crucial scientific assessments and consultations

In a May 2022 letter obtained under the Freedom of Information Act by Bloomberg Law, Dr. Sean Hayes, PhD, Chief of Protected Species, NOAA NEFSC, clearly documents and confirms the NARW's fragile hold on existence. First, the Chief of Protected Species notes that there are less than 350 remaining NARW animals. Again, COA notes, the Draft North Atlantic Right Whale and Offshore Wind Strategy states that *not one* animal can be lost.

Looking later in the development phases of OSW facilities, the letter from Dr. Hayes states:

The development of offshore wind poses risks to these species, which is magnified in southern New England waters due to species abundance and distribution. These risks occur at varying stages, including construction and development, and include increased noise, vessel traffic, habitat modifications, water withdrawals associated with certain sub-stations and resultant impingement/entrainment of zooplankton, changes in fishing effort and related potential increased entanglement risk, and oceanographic changes that may disrupt the distribution, abundance, and availability of typical right whale food (e.g., Dorrell et al 2022). 19

It is clear that any further disturbance of the NARW species will have an impact on this critically endangered species. Some scientists estimate that the species will go extinct within 20 years with current threats.²⁰

2. Threats to Marine Mammal Health & Survival

The threats to marine mammals, including NARW, include:

negative impacts to whale habitat which may take the form of development, pollution, noise, overfishing, and climate change. Shipping channels, aquaculture, offshore energy development, and recreational use of marine areas may destroy whale habitat or displace whales which would normally use the area. Oil spills and other chemical pollutants are also a threat to whales and the prey which they feed on.²¹

¹⁸ Letter from Sean A. Hayes, PhD, Chief of Protected Species, NOAA NEFSC, to Brian R. Hooker, Lead Biologist Bureau of Ocean Energy Management, Office of Renewable Energy Programs, dated May 13, 2022.

¹⁹ See id.

²⁰ Pennisi, Elizabeth. "The North Atlantic right whole faces extinction." Science, November 7, 2017, https://www.science.org/content/article/north-atlantic-right-whale-faces-extinction.

²¹ Conserve Wildlife Foundation of New Jersey, "New Jersey Endangered and Threatened Species Field Guide: North Atlantic Right Whale," as seen 12/9/2022, http://www.conservewildlifenj.org/species/fieldguide/view/Eubalaena% 20glacialis/

Specifically, about offshore wind development impacts on the marine ecosystem, NMFS says,

Scientists around the world are still investigating the potential impacts of offshore wind energy development on marine life. Site assessment, construction, and operations could interact with marine life on the seabed, in the water, and at the surface. For example, offshore wind energy projects could:

- Increase ocean noise, which could affect the behaviors of fish, whales, and other species
- Introduce electro-magnetic fields that impact navigation, predator detection, communication, and the ability for fish and shellfish to find mates
- Change existing habitats by altering local or regional hydrodynamics
- Create a "reef effect" where marine life cluster around the hard surfaces of wind developments
- Impact organism life cycle stages, including larval dispersal and spawning
- Change species composition, abundance, distribution, and survival rates
- Increase vessel traffic, which could lead to more vessel strikes
- Release contaminants that can be consumed or absorbed by marine life. 22

Offshore wind, in the current proposed scale, scope, and magnitude significantly added to the threats to marine mammals, including noise, vessel strikes, and impacts to prey. Access to food sources for large whales is essential. The importance of the waters off New Jersey as feeding grounds for all marine mammals is increasing.

The threats to marine life, including NARW, from offshore wind development activities are year-round. It is documented that North Atlantic right whales are in the region at all times of the year. Data from WhaleMap and the Mid-Atlantic Ocean Data Portal indicate an abundance of NARWs off the NJ coast throughout the year²³. Further, a Right Whale Slow Zone southeast of Atlantic City was effective in December 2021²⁴. According to the Conserve Wildlife Foundation of New Jersey:

Within the western North Atlantic Ocean, right whales feed during spring, summer, and fall in temperate and subpolar latitudes near eastern Canada and the northeastern U.S. During the winter, many individuals from this population can be found off the northeast coast of Florida and Georgia, their breeding and calving grounds. Some right whales, however, may remain at their northern feeding grounds during the winter. ²⁵

²² National Oceanic & Atmospheric Administration, National Marine Fisheries Service, "Offshore Wind Energy: Protecting Marine Life," https://www.fisheries.noaa.gov/topic/offshore-wind-energy/protecting-marine-life, as seen 5/14/2023.

²³ See https://portal.midatlanticocean.org.

²⁴ National Oceanic & Atmospheric Administration, Fisheries, "Extension of Right Whale Slow Zone Southeast of Atlantic City, NJ." As seen, 11/15, 2022:

https://content.govdelivery.com/accounts/USNOAAFISHERIES/bulletins/2fef565.

²⁵ Conserve Wildlife Foundation of New Jersey, "New Jersey Endangered and Threatened Species Field Guide: North Atlantic Right Whale," as seen 12/9/2022, http://www.conservewildlifenj.org/species/fieldguide/view/Eubalaena%20glacialis/

Other studies concur finding year-round presence of right whales in the mid-Atlantic (Whitt et al Atlantic). Right whales are present in the mid-Atlantic more often than previously believed."²⁶

The Applicant's activities will increase the number of vessels in the ocean in the project area, leading to an increased threat of harm by vessel strikes to marine mammals. Specifically, "collisions with ships are an increasing threat to right whales...Right whales are especially slow-moving, compared to other large whales, and therefore more susceptible to being struck by ships."²⁷ Further, the take authorizations issued by NMFS include the requirement of Protected Species Observers ("PSO") on board vessels. However, as NOAA itself states: "Right whales can be very difficult to spot from a boat due to their dark color and lack of a dorsal fin. Poor weather and sea state or low light conditions can make spotting these whales nearly impossible."²⁸

COA urges NMFS to specifically assess the cumulative impacts on marine mammals, particularly the NARW, from all the vessels associated with the Applicant's project as well as other offshore wind projects proposed or underway in this region.

3. Excessive Takes of Marine Mammals

Under the Marine Mammal Protection Act ("MMPA"), citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region may request authorization for incidental, but not intentional, takes of "small numbers" (emphasis added) of marine mammals pursuant to that activity for a period of no more than five years. ²⁹ The NMFS, which has been delegated the authority to administer the relevant legal framework, may allow takes under the MMPA only if the agency determines that the total number of authorized incidental takes during the five-year period will have a "negligible impact" on the relevant species or stock. ³⁰ "Negligible impact" is, in turn, defined as an impact that is not reasonably likely or expected to "adversely affect the species or stock through effects on annual rates of recruitment or survival. ³¹ Finally, the applicable legal framework distinguishes between "Level A" takes and "Level B" takes. In the context of offshore wind energy development and related activities, "Level B harassment" refers to "any act of pursuit, torment, or announcement which has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering." ³² "Level A" takings, on the other hand, refer to "any act of

²⁶ New York State Department of Environmental Conservation, "Species Status Assessment," as seen 12/9/2022, https://www.dec.ny.gov/docs/wildlife pdf/sgcnnatrightwhale.pdf.

²⁷ Conserve Wildlife Foundation of New Jersey, "New Jersey Endangered and Threatened Species Field Guide: North Atlantic Right Whale," as seen 12/9/2022,

http://www.conservewildlifenj.org/species/fieldguide/view/Eubalaena%20glacialis/

²⁸ National Oceanic & Atmospheric Administration, National Marine Fisheries Service, "Reducing Vessel Strikes to North Atlantic Right Whales," https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales as seen on 5/15/2023.

²⁹ 16 U.S.C. § 1371(a)(5)(A)(i).

³⁰ *Id.* § 1371(a)(5)(A)(i)(I).

³¹ 50 C.F.R. § 18.27(c).

³² 16 U.S.C. § 1362(18).

pursuit, torment, or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild."³³

Recently, NMFS announced a disturbing "biological opinion"³⁴ for Ocean Wind 1, another massive OSW project proposed off New Jersey, that states the project will "likely to adversely affect, but is not likely to jeopardize, the continued existence of any species of ESA-listed whales, sea turtles, or Atlantic sturgeon or destroy or adversely modify any designated critical habitat." This federal does not exude confidence in the protection of marine life; in fact, it is alarming. This biological assessment and opinion are just for *one* of the many OSW projects – Ocean Wind 1. Cumulatively, with all the issued and pending take authorizations for the 30 projects in the Northeast, how many issued takes will cause impacts on species populations? What are thresholds for action should those cumulative takes cause harm? What are the response plans for impacts to marine mammals should populations decline or be impacted?

a) COA rejects the numbers proposed in the application as "Small"

The number of takes in this Draft IHA for the Applicant is <u>9,086 marine mammals</u>. These take numbers are not "small;" however, of greater concern is the cumulative impacts of all the projects concurrently under siting and characterization, construction, and operation, and later, decommissioning. The take numbers are outrageous and fail to meet the legal requirements for mammal protection, much less for endangered species.

North Atlantic Right Whales

The harm that offshore wind energy development may inflict upon NARWs throughout site assessment, construction, and operation, is widely recognized.³⁵ Offshore wind projects will significantly exacerbate the existing threats posed to NARWs by ship collisions and entanglements. With such low population numbers, and, as noted earlier, based on the recommendation by a federal scientist that not one NARW can be lost, cumulative impacts must be considered for NARWs and other endangered species.

Moreover, the impacts of activities that may be authorized in this IHA request will compound those that already occurred under the terms of the Applicant's previous IHA for site characterization and assessment. Moreover, the aforementioned sum must be considered alongside other takes of marine mammal species, including the critically endangered NARWs, that NMFS has authorized for other wind activities along the species' migratory range from North Carolina to Maine. Such authorizations include those for site characterization, assessment, and construction activities that are simultaneously occurring for offshore wind energy development lease sites.

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³³ *Id*.

³⁴ National Oceanic & Atmospheric Administration, National Marine Fisheries Service, "NOAA Issuing Biological Opinion on the Ocean Wind 1 Offshore Energy Project," April 4, 2023, https://content.govdelivery.com/accounts/USNOAAFISHERIES/bulletins/352c198.

³⁵ See Conservation Law Foundation, et al., Strong Mitigation Measures Are Essential to Protect the North Atlantic Right Whale During All Phases of Offshore Wind Energy Development (Feb. 2022), https://www.nrdc.org/sites/default/files/narw-mitigation_feb2022.pdf; Vineyard Wind – NGO Agreement (Jan. 22, 2019), https://www.nrdc.org/sites/default/files/vineyard-wind-whales-agreement-20190122.pdf.

Again, currently, there are **14 Active Incidental Take Authorizations** (for marine site characterizations and construction) and **14 "in process" Incidental Take Authorizations** (for marine site characterizations and construction) for offshore wind projects from Maine to South Carolina. It is also important to note that this take request follows **one** previous IHA application by the Applicant to take marine mammals as a result of preconstruction activities, ³⁶ and precedes the future take authorizations needed for continued construction, operation, and decommissioning.

Of all species under consideration in this application, the NARW population is the most susceptible to even the slightest harm. Also, COA notes that vessel strikes pose one of the largest threats to NARWs. According to NOAA, "vessels of nearly any size can injure or kill a right whale³⁷." If approved, the survey vessels will add more vessels and round-trip vessel trips to an already busy port region, thereby adding more opportunities for vessel strikes. For accountability and fairness, how and who will determine which vessel struck a NARW or other species if that should happen? Especially given the threat posed to NARWs as a species by even one instance of a vessel collision, and the existence of NARW in the project area, NMFS should reject/deny the Applicant's request.

In addition, noise is a significant threat to the survival of whales:

Noise pollution created by ship traffic or offshore construction may negatively impact whales by disrupting otherwise normal behaviors associated with migration, feeding, alluding predators, rest, breeding, etc. Any changes to these behaviors may decrease survival, simply by increasing efforts directed at avoidance of the noise and the perceived threat.³⁸

A growing source of noise pollution that interferes with NARWs' most vital social functions is offshore wind-related activities. More specifically, low frequency noise from large ships involved in offshore wind-related activities overlaps with the acoustic signals used by right whales. These large whales rely on sound to breed, navigate coastlines, and find food. Right whales communicate with one another by making calls, which can cover distances of more than 20 miles.³⁹ The calls let whales stay in touch, share information about food, help mates find each other, and keep groups together while traveling.

Rising levels of ocean noise are interfering with whales' ability to communicate. Anthropogenic noise interferes with their ability to eat, mate, and navigate; therefore, it is essential to their survival that these sounds travel the ocean undisturbed. 40 North Atlantic right whales have been

³⁶ Federal Register Notice, "<u>Takes of Marine Mammals Incidental to Specified Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys</u>" for Attentive Energy, LLC, published 8/22/2022.

³⁷ See id.

³⁸ Conserve Wildlife Foundation of New Jersey, "New Jersey Endangered and Threatened Species Field Guide: North Atlantic Right Whale," as seen 12/9/2022,

http://www.conservewildlifenj.org/species/fieldguide/view/Eubalaena%20glacialis/
³⁹ Woods Hole Oceanographic Institution, "Right Whales," as seen 11/15/2022, https://www.whoi.edu/know-your-ocean-ocean-topics/ocean-life/marine-mammals/right-whales/.

⁴⁰ National Oceanic & Atmospheric Administration, Fisheries, "North Atlantic Right Whale," as seen 11/15/2022, https://www.fisheries.noaa.gov/species/north-atlantic-right-whale.

observed increasing their call amplitude with the rise of background noise, and noise pollution has been correlated with an increase in stress-related fecal hormone metabolites.⁴¹

b. Excessive Takes of Other Marine Mammal Species, including Endangered & Threatened

Clean Ocean Action finds the variety of species and total number of individual Level B takes proposed by the Applicant unsupportable. The Applicant's request is for the taking of a small number of marine mammal species by Level B harassment; the 9,086 marine mammal takes is by far not "small." The takes also include endangered and protected marine mammals, including nearly 5,000 dolphins of various species.

Bottlenose dolphin are highly social, and arguably the most recognized and beloved small cetacean. ⁴² In addition to their inherent value to the American public, the dolphins are an increasingly important driver of economic growth for tourism and related industries. ⁴³ The cumulative impact of harassing thousands of bottlenose dolphin may be considerable and irreversible, but these impacts are not considered in the application as currently proposed. How can NMFS justify taking this number of bottlenose dolphins, or any animal for that matter, for construction of one private company's offshore wind projects? These shortcomings merit the rejection of the Applicant's take request.

Furthermore, COA also strongly encourages NMFS to reject the take request due to deficiencies in its analysis concerning the proposed activities' effects on harbor seals. Frequently spotted along both the East and West Coasts of the U.S., harbor seals are known for resting on floating ice with their head and rear flippers elevated in a "banana-like" position, leading to their popularity with excited winter beach-goers. Hesides their wide recognition among the American public, harbor seals also play a major role in maintaining balance in marine food webs as well. He will be a seal of the seal of the

Despite the unique importance of this species, however, COA maintains there is not sufficient baseline information about how harbor seals use the waters at the Applicant's lease site to conclude that the activities covered by the application will have a negligible impact on harbor seals. More specifically, a COA employee attended a virtual "Science Saturday" event in early 2022 at which a representative of the New Jersey Department of Environmental Protection ("NJDEP") indicated that, to date, no one has tracked harbor seals to understand the species' pre-

⁴¹ North Atlantic Right Whale 5-Year Review, NOAA FISHERIES SERV. NE. REG'L OFFICE 11-12 (Aug. 2012), http://www.nmfs.noaa.gov/pr/pdfs/species/narightwhale-5yearreview.pdf

⁴² Common Bottlenose Dolphin, MARINE MAMMAL CENTER (visited Feb. 28, 2022), https://www.marinemammalcenter.org/animal-care/learn-about-marine-mammals/cetaceans/common-bottlenose-dolphin.

⁴³ The Economic of Marine Mammals, MARINE MAMMAL COMMISSION (visited Feb. 28, 2022), https://www.mmc.gov/priority-topics/value-marine-mammals/.

⁴⁴ Harbor Seal, NATL. MARINE FISHERIES SERV. (visited Feb. 28, 2022),

https://www.fisheries.noaa.gov/species/harbor-seal.

⁴⁵ Seals, INTL. FUND FOR ANIMAL WELFARE (visited Feb. 22, 2022), https://www.ifaw.org/animals/seals#:~:text=As%20one%20of%20the%20keystone,%2C%20polar%20bears%2C%20and%20sharks.

construction use of offshore wind energy lease areas off the NJ coast. 46 This admission strongly suggests that decisionmakers do not yet have sufficient information about the role of these lease areas in harbor seals' life-cycles to substantiate the numbers of harassments expected to occur by this application. With this in mind, the Applicant requests the taking of **1,596** harbor seals and **1,596** gray seals by Level B takes, for a total Level B harassment of **3,192 seals.** With so little baseline information available about seals and their use of the project area and waters off New Jersey, NMFS should therefore reject the Applicant's take request.

C. Unprecedented number of whale deaths occurring in a short period of time along the NJ/NY coast starting in December 2022

Especially in light of the NARW's critically endangered status, the ongoing Unusual Mortality Event that this species is experiencing and, consequently, the existential threat posed to the species by obstacles to even one individual's survival, the best scientific literature cannot justify harassing even <u>one</u> of the 336 remaining individuals in a short timeframe for the Applicant's construction activities. Harassing one NARW is not negligible; it is significant. This is particularly true upon consideration of the multitude of additional NARW takings that the Applicant will be pursuing for the continued preconstruction, as well as the construction, operation, and decommissioning phases of the Applicant's projects. Again, not one NARW can be lost according to federal scientists, as previously noted.

Further, according to reports of dead marine mammals to Clean Ocean Action the Marine Mammal Stranding Center⁴⁷ to date, <u>11 whales and at least 35 dolphins and porpoises</u> have washed ashore dead in the NY/NJ region since December 2022. COA, along with members of the public, including over 358,250 people, have called for a pause in any offshore shore wind related activities until an investigation is conducted into the potential causes of the whale and dolphin deaths. Based on the NMFS list of impacts caused by offshore wind, which includes noise and ship strikes, it is plausible that the preconstruction offshore wind activities can be connected with these marine mammal deaths and must be thoroughly investigated. Indeed, there are more harassment authorizations under review and in process.

In response to this request, NMFS, BOEM and Marine Mammal Commission have denied a possible link; however, no evidence has been presented to detail these findings by the agencies, to date. Following the denials, these agencies stated that the whale deaths were due to increased ship strikes and increased whale populations in the region. However, no substantiating data was provided on either alleged cause. Can the NMFS provide studies and evidence that whales are increasing in the region during the winter?

⁴⁶ "Science Saturday: Offshore Wind," LONG BEACH ISLAND FOUNDATION OF ARTS AND SCIENCES (Feb. 19, 2022). Specifically, the NJDEP representative identified the tracking of harbor seals off the NJ coast to understand their use of lease areas prior to the construction of offshore wind turbines as a project concept that NJDEP is currently considering.

⁴⁷ Marine Mammal Stranding Center, "NJ Cetacean Strandings from December 2022 Through Present," https://mmsc.org/cetaceans-2002-2023 as seen 5/15/2023.

It should be noted that less than 50% of the whales had evidence of ship strikes, and ship strikes do not necessarily determine cause of death. Whales may have been hit after death or been impaired by another cause, and then secondarily hit by a ship. Also, due to their erratic and frequent activity, survey ships should not be discounted as a cause without evidence.

To fact check the increased shipping narrative, COA reviewed the data from the Port Authority of NY/NJ Twenty Equipment Unit (TEU) data, which shows commerce was down over 20% in December, when whales first started frequently washing-up, and commerce declined about 25% to date from January - March of 2023. ⁴⁸ Therefore, it is not accurate to say increased shipping was the definitive cause of ship strikes on whales during this time.

It is imperative for an independent investigation to identify the cumulative impacts of preconstruction activities on marine life prior to moving forward with reviewing and issuing further harassment authorizations, whether it be for marine site characterizations or construction, operation, and decommissioning phases of OSW projects. COA urges NMFS to reject the Applicant's take request.

II. Other Issues of Importance, including Lack of Fairness, Transparency, and Accountability

The concerns discussed in the previous section is not exhaustive; as the MMPA recognizes, every marine mammal is important, and the effects of the proposed activities on other species—including those that are actively included in the recent unprecedented whale deaths and the Unusual Mortality Events, such as the North Atlantic right whale and humpback whale—should encourage NMFS to demand more baseline data and severely restrict the Applicant's authorized takes for the activities in question. COA consequently urges NMFS to reject the Applicant's IHA request.

Further, a serious issue of concern is a lack of accountability. Again, as referenced above,

By 2030 the Northeast large marine ecosystem will be occupied by over 2.4 million acres of leases, 3,400 turbines, and 10,000 miles of submarine cables; and an additional 5.7 million acres is also under consideration for further development.⁴⁹

Never has an ecosystem been under such massive industrial development pressure and impact over a span of less than decade. Given this unimaginable and unprecedented scope and scale of industrial OSW development in the Northeast region, and off NY/NJ coasts in particular, NMFS must provide clarity and due process *now* for the determination of accountability. At what point will there be too many accumulated Level A and Level B harassments from OSW energy

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⁴⁸ The Port Authority of New York and New Jersey, "Facts and Figures," as seen 4/30/2023, https://www.panynj.gov/port/en/our-port/facts-and-figures.html.

⁴⁹ Andy Lipsky, NOAA Fisheries. "Fisheries, Wildlife, and Ecosystem Science in a New Era of Offshore Wind Energy Development." NOAA Ecosystem Based Management and Ecosystem Based-Fisheries Management Seminar Series, March 9, 2022, https://www.youtube.com/watch?v=Dh7yBEDHzL8.

development or other activities? What are the guardrails to determine how many takes will be too many? How will NMFS distinguish between impacts, such as those from the wind industry as compared to those from other shipping traffic, especially as wind facilities are built-out and marine life and ships are concentrated into more narrow corridors? Who will be responsible and how will accountability be managed? How will the number of takes be lowered over time to address the additional, cumulative stress to marine life? Or will it be?

On another matter, how will population dynamics be measured as species populations decline from stress or injury from offshore wind development? Or food scarcity as migratory fish populations move or as fish structure changes? Or will the agencies simply place blame on "climate change" as a catch-all to lower populations of marine mammals? How many marine mammals can be harassed and injured before the populations, and associated ecosystems, collapse, all for the current unfounded benefits of the new offshore wind energy industry? How many takes, for individual projects or requests or cumulatively, are too many? The current process by which takes are evaluated must include cumulative impacts to populations from all incidental take requests and authorizations. These questions and issues, among others, must be addressed at the outset to ensure transparency and accountability for the impacts to the living marine ecosystem from this wholesale, rapid industrial development of the ocean.

Further, numerous IHAs have already been issued, and ITRs and NOAs for construction are already in process for many OSW energy projects in the region and along the East Coast of the United States. It is essential that systems are in place to monitor the impacts from these activities in these areas. Impacts must be documented and fully investigated to inform forthcoming incidental take requests and authorizations. Monitoring reports are not enough. It is necessary for on-the-ground independent scientists and response teams to be in the areas included in incidental take authorization areas to monitor for impacts so immediate response or investigation can occur.

As an example, on December 5, 2022, an infant endangered Sperm Whale washed-up on the beach in Keansburg, NJ.⁵⁰ Thankfully, volunteers at the Marine Mammal Stranding Center were able to be on the scene. Given that massive, large-scale offshore wind project activities are already underway in this region, an organization charged with responding to an endangered marine mammal incident should be fully funded by the state and federal agencies to collect the animal, if possible, or be provided the means to conduct a thorough and immediate investigation, including a comprehensive necropsy, to determine that cause of death. The investigation should include what, if any, offshore wind energy related activities, or other offshore activities, were ongoing within the window of time the animal was potentially impacted. An immediate response and thorough investigation of such incidents is necessary to ensure accountability and the protection of marine mammal species.

Of further note, COA protests the double standard that has developed for the offshore wind industry when it comes to protecting marine mammals. COA acknowledges the importance of reducing other common harms to NARWs and other marine mammals, such as entanglements and vessel strikes, but these efforts to help the species will be of limited benefit if they coincide

⁵⁰Radel, Dan. "Infant 12-foot sperm whale washes up dead on Keansburg beach." Asbury Park Press, 12/5/2022. https://www.app.com/story/news/local/animals/2022/12/05/keansburg-nj-infant-sperm-whale-washes-up-dead-beach/69703142007/

with an increased tolerance for other activities that torment and annoy these invaluable creatures. The noise, electromagnetic fields, and drilling associated with offshore wind development and the site characterization activities that precede them, as well as the construction, operation, and decommissioning activities, must be treated as the serious and amplifying threats to the NARW, and other marine mammals, that they are—no different than entanglements or vessel strikes. NMFS should seize the opportunity to set a strong precedent for protecting NARWs and all whales by denying the Applicant's take request.

III. Conclusion

In sum, COA urges the NMFS to reject and deny the Applicant's harassment "take" request of **9,086 marine mammals** for marine site characterization activities for an offshore wind power plant and the associated export cables. It is clear the Applicant's activities would cause an unacceptable number of Level B harassments of extremely at-risk and endangered North Atlantic right whales, as well as an unacceptable amount of Level B take authorizations for other marine mammal species, including other federally protected whales, dolphins, porpoises, and seals.

For the North Atlantic right whale, the activities in question are reasonably likely or expected to adversely affect this critically endangered species—both individuals and the stock as a whole—through effects on the species' annual rates of recruitment and survival; this impact cannot reasonably be merely minimal or negligible. It is imperative that NMFS engage in all means possible to avoid harassment to all the uniquely significant species protected by the MMPA, especially the NARW, and to protect ecosystems.

In addition, the cumulative impacts from all incidental take requests and authorizations for offshore wind projects in the same region, as well as for other uses, must be considered when reviewing each application for "takes" of marine mammal species. The total takes for all species affected must be considered alongside takes that NMFS has authorized for other wind activities including for site characterization, assessment, and construction activities (and later, operation and decommissioning activities) that are simultaneously occurring in the region and in the migration areas for marine life.

For the foregoing reasons, COA strongly urges NMFS to reject Attentive Energy's request for an Incidental Harassment Authorization. Should you have any questions or would like to further discuss these concerns, please feel free to contact us.

Respectfully submitted,

Cindy Zipf
Executive Director

Kari Martin Advocacy Campaign Manager

Lau ZMartin



ITP Lock - NOAA Service Account <itp.lock@noaa.gov>

Comments on Docket No. RTID 0648-XC805

1 message

To: ITP.lock@noaa.gov

Wed, May 17, 2023 at 2:42 PM

Hello,

Please see the attached comments regarding the Attentive Energy, LLC request for an IHA. Thank you,

Lane Johnston

Programs Manager

Responsible Offshore Development Alliance





May 22, 2023

Jolie Harrison, Chief Permits and Conservation Division NMFS Office of Protected Resources

Re: Takes of Marine Mammals Incidental to Specific Activities; Taking Marine Mammals Incidental to Marine Site Characterization Surveys in the New York Bight; Docket No. RTID 0648-XC805.

Submitted electronically via email to ITP.lock@noaa.gov

Dear Ms. Harrison,

The Responsible Offshore Development Alliance (RODA) submits the following comments regarding the National Marine Fisheries Service (NMFS) Incidental Harassment Authorization (IHA) for Taking Marine Mammals Incidental to Marine Site Characterization Surveys in the New York Bight from Attentive Energy, LLC for OCS-A 0538. These comments, while responsive to the proposed IHA for Level B harassment incidentals to site characterization of OCS-A 0538, are also directed toward others under developments (authorized or proposed) in the U.S. Atlantic.

RODA is a national coalition of independent fishing businesses, associations, companies and community members committed to ensuring the compatibility of new offshore development with their businesses. Members of our coalition operate in federal and state waters and shoreside throughout the New England, Mid-Atlantic, and Pacific coasts.

Fishermen and the public are extremely concerned about potential impacts to protected resources arising from the construction of offshore wind energy (OSW) facilities. We have submitted numerous comments expressing the fishing industry's concerns regarding the process for authorization of marine mammal takes in OSW activities, particularly: (1) in contrast to the strict regulations for marine mammal harassment and takes applied to the fishing industry; and (2) authorizations that are segmented throughout OSW project phases without a cumulative, holistic analytical approach. As you know, many Atlantic fisheries are severely constrained by regulations designed to minimize North Atlantic right whale and other protected resource interactions, and any increase in take or harassment of these species will very likely result in further impacts to fishing operations.

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¹ 88 Fed Reg. 24553 (April 21, 2023).

There are two active Unusual Mortality Events for whales in the Atlantic region: the Atlantic Humpback Whale and the North Atlantic right whale (NARW).² At least 32 large whales and 38 small cetaceans have washed up on the Atlantic Coast between Dec. 1 and mid-April. A co-founder and ex-president of Greenpeace recently was quoted as saying, "[d]rilling foundations for offshore wind turbines and sound pulses used to prepare for the 900-foot towers may be creating a 'death zone' for whales." There is no conclusive evidence that recent whale and other marine mammals deaths off the Atlantic Coast are related to activities supporting offshore wind (OSW) development; but similarly, there is no conclusive evidence that finds such activities are not a contributing factors. NMFS must diligently consider if authorization of additional harassment activities should be allowed, given the recent mortalities, active UMEs, and lack of a definitive answer regarding the role that OSW is playing in those mortalities. BOEM and NMFS are in the press offering carefully worded statements absolving the OSW industrial machine from any responsibility in the strandings and deaths. The absence of evidence is not evidence of absence. As suggested above, requiring and conducting timely necropsies on all dead or stranded marine mammals would provide us and the concerned public some much needed answers.

On May 12, a news story was published that "CIP and Avangrid JV Vineyard Wind is to deploy and test a secondary bubble curtain during foundation installation for the 800 MW offshore wind project." The bubble curtain is intended to "absorb and dampen sound during foundation installation". This begs the question, if sound was not an issue why is there a need to absorb and dampen it?

Local elected officials have called for an immediate moratorium on development until scientists can assure the public that OSW activities do not pose threats to whales.⁵ Environmental groups are calling for similar federal action for a federal probe to better understand the recent whale deaths in the region.⁶ This necessarily requires full necropsies, conducted by an independent body, on any marine mammals which strand in the area and the release of those findings to the public. With increases in strandings coinciding with activities in support of OSW development, the public is

https://www.msn.com/en-us/news/us/republican-demands-nj-gov-murphy-halt-offshore-wind-project-for-30-60-days-amid-spate-of-whale-deaths/ar-AA1baC0d

 $https://clean ocean action.org/file admin/editor_group1/Issues/Wind/Updated_Biden_Letter_and_IHA_Factsheet_Demanding_investigation_of_dead_whales.pdf$

² See https://www.fisheries.noaa.gov/national/marine-life-distress/active-and-closed-unusual-mortality-events (Accessed May 14, 2023).

³ See https://nypost.com/2023/05/08/not-unreasonable-to-link-whale-deaths-offshore-wind-farm-work-ex-greenpeace-chief-says/ (Accessed May 14, 2023)

⁴ See - https://renews.biz/85711/vineyard-wind-to-trial-secondary-bubble-curtain/. (Accessed May 14. 2023)

 $^{^5}$ See https://chrissmith.house.gov/uploadedfiles/2023-01-30_letter_to_secretary_raimondo.pdf ; https://vandrew.house.gov/media/press-releases/congressman-van-drew-demands-all-offshore-wind-activity-end-im Mediately-until $\it and$

⁶ See

rightly concerned and asking questions. At a minimum, NMFS should soberly consider if additional authorization for Level A and B harassment should be permissible given the current circumstances.

Lack of Cumulative Effects Analysis and Segmented Process

Every phase of the OSW development process has the potential to impact marine mammals and other protected species. Each of the activities associated with pre-construction surveys, construction, operations, monitoring surveys, and decommissioning will require some type of permit or authorization for interaction with protected species. To our knowledge, there are no resources easily accessible to the public to understand what authorizations are required for each of these activities. This is detrimental not only to having a well-informed public who are then asked to provide comment and input, but suggests a lack of cumulative perspective of OSW development activities from numerous projects to our protected resources. We recommend that NMFS improve the transparency of this process and move away from a segmented phase-by-phase and project-by-project approach to takes of marine mammals by either IHAs or Letters of Authorization (LOAs). The fishing industry has asked for a comprehensive list/table of all Level A and Level B takes under currently approved Authorizations per project, as well as Level A and Level B takes per project being requested in all Authorization applications currently under review. Using the list provides by NMFS on the Incidental Take Authorizations for Other Energy Activities (Renewable/LNG) webpage⁷, we believe that information to be the following:

All Currently Authorized Activities:

- 102,927 marine mammals subject to Level B harassment.
 - This includes 197 NARW and 268 Humpback whales; both of which are experiencing an unusual mortality event.
- 122 marine mammals subject to Level A harassment.
 - This includes 0 NARW and 14 Humpback whales. As will be more fully developed below, it is illogical for an applicant to seek Level A takes for ALL other marine mammals they will be harassing with Level B takes except the NARW.

All Proposed and Unauthorized Activities⁸

- 507,355 marine mammals subject to Level B harassment.
 - This includes 696 NARW and 2,212 Humpback whales; both of which are experiencing an unusual mortality event.

⁷ See - https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable. (Accessed May 14, 2023)

⁸ Includes all proposed activities through the LOA request submitted by Dominion Energy which was published in the Federal Register on May 4, 2023.

- 1,188 marine mammals subject to Level A harassment
 - This includes 0 NARW and 57 Humpback whales.

Under currently authorized and proposed IHA/LOA requests submitted to NMFS to support OSW development a combined total of 610,263 whales, dolphins and pinnipeds will be subjected to Level B harassments. Another 1,310 will be subjected to Level A takes. While there are no requests for Level A takes on the critically endangered NARW, there are 893 requests for Level B harassment. As of October of last year, there were an estimated 340 NARW in existence. In support of OSW activities, NMFS will permit/authorize each NARW to be harassed more than 2 times. This information points to the need to take a stark look at permissible incidental takes for marine mammals from OSW development, and that a <u>cumulative approach</u> is absolutely paramount.

Right Whale Abundance Adjacent to the Project Area

The location of the OCS-A 0538 lease is in an area in close proximity to important migration corridors and seasonal management areas set in place to protect NARWs. With over one third of the current population, including up to 30 percent of known calving females, visited the RI and MA Lease Areas between 2010 and 2015, safe passage through any wind energy area must be assured.

NARWs must locate and exploit extremely dense patches of zooplankton, specifically, high concentrations of a lipid-rich copepod (*Calanaus finmarchicus*), to feed efficiently, and these dense patches are likely a primary characteristic of the spring, summer, and fall right whale habitats within the region. Given the small population of NARWs, it is crucial that potential impacts to this population be fully considered before IHA issuance. Scientists agree that the loss of even one more breeding female whale would be catastrophic to the population.

Increased Uncertainty for Marine Mammal Surveys

The Bureau of Ocean Energy Management (BOEM) has previously determined that the effects on survey aerial coverage for marine mammals, including the North Atlantic Right Whale (NARW), will substantially impact NMFS' ability to continue using current methods to fulfill its mission of precisely and accurately assessing protected species. This will result in an unacceptable level of uncertainty in protected resource management. It will also potentially result in an event that may otherwise be a "harassment" event become a mortality event, if entanglement response is delayed, hampered, or made impossible and injured whales cannot be rescued. So too is the cessation of NMFS protected resource surveys a threat to climate science itself; assessment of protected resource and fish stocks over long time series is a key factor in understanding ecosystem health, function and shifts and responses to climate change.

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⁹ Vineyard Wind SEIS, p. 3-127.

Concerns Regarding Treatment of Whales in OSW Permitting

A major concern is the high amount of increased vessel traffic associated with offshore wind development throughout the region in areas transited or utilized by certain protected resources. BOEM has also estimated that construction of each future OSW project would require an additional 25-46 vessels per project operating in the proximal geographic area at any given time, and that up to four projects would be under construction at the same time in the next few years. ¹⁰ This large increase in traffic would greatly increase the risk of ship strike to protected species, including endangered whales. NMFS has stated that slowing down vessel traffic and reducing ocean noise, as well as reducing risks of entanglements are key to regulation and management plans. However, vessel speed restrictions are not fully mandated or enforced for OSW vessels.

Additionally, associated increases in vessel noise could contribute to the suite of ongoing stressors impacting the NARW population. Noise has been found to interfere with right whale communication and increase their stress levels. In turn, "females that undergo energetic stress from reproduction may be more susceptible than males to dying from chronic injuries such as those from entanglement or vessel strikes." Noise from human activities, such as that which would occur with activities associated with wind energy installation and operation of the proposed project, can disrupt normal behavior of NARWs and may further reduce their ability to identify physical surroundings, find food, navigate, and find mates. In a letter to BOEM dated May 13, 2022, the Chief of Protected Species of NOAA's Northeast Fisheries Science Center noted "[t]he development of offshore wind poses risks to" the NARW.

The Marine Mammal Commission (MMC) has raised several concerns on other proposed authorizations for OSW development. As they are more knowledgeable on impacts of pile driving and acoustics to marine mammals, we defer to their expertise and recommend NMFS fully review the concerns they identify in their public comments. In particular, MMC cites poor analyses such as underestimation of harassment takes from impact and vibratory pile driving, noise, insufficient and incomplete monitoring measures and reporting requirements. As identified, those issues may result in costly closures or strict management restrictions for fisheries. We urge NMFS to use the best available science including the most comprehensive models for estimating marine mammal take and developing robust mitigation measures.

On September 9, 2020, seventeen environmental NGOs submitted a public comment letter

¹⁰ Vineyard Wind SEIS, p. 3-111.

¹¹ See https://www.fisheries.noaa.gov/species/north-atlantic-right-whale.

 $^{^{12}}$ See - https://newbedfordlight.org/wp-content/uploads/2022/11/UR1-2023-000009_10_17_2022.pdf. (Accessed Feb 10, 2023)

¹³ RODA has cited these comments in previous comment letters.

outlining several concerns and recommendations related to the IHA for site characterization surveys required for OSW projects. Many of the items raised can be extended to LOA request reviews. Again, we defer to their expertise but echo their concerns regarding: a) the lack of sufficient data and observations of NARWs and other protected species in areas under for considerations for OSW development and associated cable routes that are not sufficiently described by the models used by NMFS, b) the failure to take a cumulative look at take and harassment as there are numerous areas to be developed and each project will submit an IHA and LOA, c) the untested proposed mitigation and insufficient monitoring measures intended to minimize impacts to protected species, and d) no long term monitoring plans for marine mammals and protected species. This coalition provided concrete recommendations for improving mitigation measures for surveys, including: (1) incorporate additional data sources including real-world observational data into calculations of marine mammal density and take; (2) not adjust take numbers downward for large whales based on unproven mitigation measures; (3) require mitigation measures that meet the least practicable adverse impact standard; and (4) strengthen its vessel speed restrictions. We urge NMFS to ensure that each of these important topics raised by whale experts are fully addressed.

Fishermen Will be Affected by Protected Resource Take

Negative impacts to local fishermen and coastal communities as a result of a potentially adverse impact to marine mammals (e.g. vessel strike resulting in death or severe injury) are not mentioned nor evaluated in the IHA request for this project, and should be included in a comprehensive analysis. The lack of an adequate analysis of individual and cumulative impacts to these protected mammal species is concerning, given that fishermen are already highly restricted in their ability to harvest due to NARWs protections.

The entire fishing industry pays the price to protect highly migratory NARWs, not just those closest to the project area. An impact to NARWs off the South Atlantic will result in impacts to fisheries in Maine, impacts in Cape Cod Bay impact fishermen in Southern New England, and so on. These reverberating impacts are not addressed in this request.

Robust Mitigation and Clarified Accountability Measures

RODA is appreciative of the efforts OSW developers, NMFS, and others have conducted to develop and adopt mitigation measures in order to minimize construction impacts to marine mammals. However, the adequacy of these measures, as all information provided to the government by interested private parties, requires robust independent review. For example, multiple studies exist suggesting that Passive Acoustic Monitoring (PAM) has limited success in detecting NARWs due to their infrequent vocalization. The effectiveness of visual observation in detecting NARW is similarly uncertain, particularly since at-sea conditions rarely meet ideal standards (i.e. crew breaks, rough seas, location of spotter vessels, low light, or other factors that limit visual detection). We encourage NMFS to evaluate the proposed IHA with utmost care, utilizing the best available science.

Mitigation measures in this IHA request include marine mammal shutdown zones, specific to the activity and marine mammal present in the project area and while transiting. For the NARW, the shutdown zone is 500 meters. Even in the most favorable weather conditions, it can be difficult to spot a whale when it is roughly a third-of-a-mile away. In inclement weather, this can be much more so. Because observations will determine if survey activity may commence and/or continue in these zones, further clarification should be included in the IHA that explicitly states if weather or other conditions that limit the range of observation, shutdown zones will be initiated.

Fundamental questions still remain regarding what happens if harm exceeds the threshold under the proposed IHA, or any forthcoming LOAs: what can be done if take or harassment surpasses expected levels? Can a project realistically stop mid-construction or mid-operation after taxpayers have spent billions of dollars on its development? Fisheries are subject to accountability measures by law – up to and including cessation of all activity – if scientifically-based catch limits are exceeded. What accountability measures will apply to ensure that OSW developers are likewise responsible for their own impacts, and the burdens of those are not also assigned to fishermen, should they occur?

The fishing industry wants to see the protection of marine mammals and protected species and thus ask that NMFS consideration of IHAs and LOAs for offshore wind developers be applied equitably across industries. First and foremost, we must protect the marine ecosystems upon which we all rely. Secondly, the OSW industry must be accountable for incidental takes from construction and operations separately from the take authorizations for managed commercial fish stocks. Lastly, there must be a clear IHA threshold for OSW activities regionally and across project phases. With dozens of projects conducting surveys, construction, operation, and decommissioning now and in the next 30+ years, there appears to be no forward-looking plan to address all this new activity that poses a threat to marine mammals and protected species.

Thank you for your consideration of these comments.

Sincerely,

11/2

Lane Johnston, Programs Manager

Mike Conroy, West Coast Director Responsible Offshore Development Alliance



ITP Lock - NOAA Service Account <itp.lock@noaa.gov>

Objection to Request from Attentive Energy

1 message

To: "ITP.lock@noaa.gov" <ITP.lock@noaa.gov>

Fri, May 19, 2023 at 2:28 PM

Please see attaached.



objection to AE05192023.pdf 6029K



Borough of Seaside Park

BOROUGH HALL

732-793-3700

1701 North Ocean Avenue, Seaside Park, New Jersey 08752 www.seasideparknj.org

FAX 732-793-3737

Email: mayorpeterson@seasideparknj.org

May 19, 2023

Jolie Harrison, Chief, Permits and Conservation Division Office of Protected Resources National Marine Fisheries Services

ITP.lock@noaa.gov

Objection as to Request from Attentive Energy, LLC (AE) for Authorization to Take Marine Mammals, Alleged to be "Incidental" in Marine Site Characterization Surveys In Coastal Waters off of New Jersey and New York In the "New York Bight"

Dear Chief Harrison,

As the Mayor of the New Jersey coastal community of Seaside Park, I am writing to render the within comment which I would ask you to consider as part of the overall record, with respect to current view of an application of Attentive Energy, LLC, (AE) for authorization to take marine mammals. Said mammals to be taken are described as being "incidental", to marine site characterization surveys in coastal waters off of New Jersey and New York, in the New York Bight, specifically within the Bureau of Ocean Energy Management (BOEM), commercial lease of submerged lands for renewable energy development on the outer continental shelf (OCS), lease area OCS-A-0538 (lease area), and the associated export cable route (ECR) survey area.

As you may be aware, our town, itself, has experienced a tragic avoidable death of a humpback whale, which washed up on our beach. Related to the death of this humpback whale, and the extraordinary number of recent deaths of other marine mammals species, including the critically endangered North Atlantic Right Whale, the Ocean County Mayors Association has passed a unanimously adopted resolution, which calls upon all levels of the federal government and State of New Jersey government, immediately to implement a moratorium on any and all offshore wind farm preconstruction, and construction actions. First, further review should occur, associated with the massive industrialization, proposed, in the form of wind farm projects located off the New Jersey and New York coasts. This pause should continue, until further independent, scientific investigations have been conducted.

Similarly, related to the deceased whales washing upon our shores, the United States Coast Guard at Barnegat Light has also reported several more floating whales off the New Jersey coast, an indication that not all of the whale deaths have even been accounted for.

As your agency is already aware, Benjamin Laws, Deputy Chief for the Permits and Conservation Division with the NOAA Fisheries Office of Protected Resources, has already acknowledged that "there is an expectation that the work will impact marine life, including whales". Nevertheless, NOAA and several national, self-described, environmental groups have indicated that there is a lack of evidence associated with the dramatic and unexplained recent deaths of whales and other marine mammals.

The proposed, self-described "incidental" taking of the lives of further precious mammals, without adequate independent scientific investigation, is unacceptable, if not outrageous.

Further, the rapid speed of your agency's review proces's, and that of other federal and state governmental agencies, as to these fast tracked even "rubber stamped", proposals for offshore wind development certainly calls into question whether adequate due diligence was done in the very inception of these proposals. Independent scientific inquiry and research must be implemented, as to the ways the effect of the proposed and admittedly adverse impacts of the taking of marine mammals, the Attentive Energy, LLC project, will cause upon our tourism industry, recreational and commercial fisheries, the quality of life of the New Jersey shore, and indeed, the very life of the ocean environment itself.

I call upon your agency to recognize the fact that the recently occurring, unexplained numerous deaths of whales and marine mammals, has taken place concurrently, with the ongoing sound surveys and the underwater noise generated by acoustic vessels. These whale deaths have occurred even before the potentially devastating construction activity, pile driving and other noise generating actions have begun.

Most importantly, as I have argued in my July 21, 2022 official comments addressed to BOEM, with regard to Docket #BOEM 2022-0034, I would ask your agency immediately to recommend the aforementioned moratorium, on any further review process, and preconstruction activities. First you should engage in a cumulative, exhaustive, independent scientific review, to be undertaken, as to all the interrelated massive industrial wind farm projects proposed for New Jersey, New York and the Atlantic coast.

Our precious ocean cannot be carved up and looked at, in a piece meal fashion, as to these proposed industrial projects, contemplated to be located directly in the migratory paths of fish and wildlife, including but not limited to various species, which your agency and the applicant have admitted will become "incidental" takes, or collateral damage. An overall independent scientific review process of all these interrelated wind farm

proposals must be undertaken, with adequate scientific inquiry. At the very least, there should first be implemented a thoroughly reviewed and monitored pilot project.

Accordingly, with regard to the currently pending request of Attentive Energy, LLC, I am hereby underscoring previously communicated comments your agency and various other federal agencies and offices, substantially discounted, if not ignored. Those relevant meritorious comments, dealing with never answered questions, would include the following:

From a general perspective, as to what many have identified as a rush to judgment, concerning various aspects of the interrelated proposals for the massive construction of off shore wind farms, I would certainly object to the process itself, and the scope of the proposal, as to the New York Bight PEIS. Even if one looks at the narrower interpretation as to the "protection of historic properties", I would render an objection to the bifurcating procedures, as well as to any ultimate decision approving the proposed massive industrial construction of wind farm sites in the New York Bight lease area. While I do not find such a narrow interpretation appropriate, there are numerous known and unknown historic shipwrecks and underwater sites of significant value, which are threatened for destruction, by the proposed massive commercial project.

Of course, the threat to our ocean environment must be investigated first.

Similarly, it is entirely inappropriate to segregate off certain areas of inquiry, which must be looked at cumulatively, for an accurate informed review. Even this too limited approach, exposes the under-valued and devastating impact of the proposed construction. This unique and irreplaceable expanse of the sea off the New Jersey Atlantic Coast, can be viewed from a historical and cultural perspective. The impact to this priceless area of ocean expanse utilized by Henry Hudson's "Half-Moon", up to the present huge vessels, in this major world shipping lane, irreparable harm.

A more appropriate review process must take into account all the interrelated historical, cultural, scientific and economic impacts and threats posed by this seemingly immovable process of massive off shore wind farm, industrial development off of New Jersey's precious coast. As such, I would urge a far more expansive and interrelated review process, so that the appropriate chief looking at the pending "New York Bight PIES" application, reviews all of the cumulative impacts involved.

As I have previously spread upon the record, before various officials of the Bureau of Ocean Energy Management reviewing process, I certainly am in favor of the utilization of some wind energy development, as a viable and productive long term source of power, in order to meet a portion of our State's and our Country's future needs. Insufficient pilot projects and scientific environmental review has occurred, however, to support your agency's seeming conclusion that off shore wind farms must

be utilized, as opposed to lesser scale on shore projects, coupled with energy conservation, and the implementation of other sources of power.

Accordingly, as I have expressed before, I am opposed to the currently proposed ongoing massive leasing of 800,000 acres of public ocean water, for off shore wind farm development, currently the subject matter of BOEM's various ongoing review procedures. The very process itself, of which the within proposal is one part, had been advertised for bidders, without first undertaking a central comprehensive and environmental assessment.

Meaning no disrespect to any one individual BOEM official, I am forced to describe the ongoing ill-conceived process, as representative of a "knee-jerk, feel good rush to judgment". Once the bid process has been finalized, with the actual sale of such lands, and leasing of our precious area of the ocean, there would be similar concurrent, investment of the various bureaucracies, through money, time and the actions of employees and officials. It is therefore, entirely unrealistic, ever to think that the overall rush for industrialization and construction of our unique coast line, in a precious area of the ocean, would ever be rescinded.

As I have already placed on the record, I oppose the proposed ongoing leasing of vast tracks of unique and valuable expanses of the Atlantic Ocean, due to the numerous grave risks presented. Prior to offering up any massive lease sale, and even in finalizing the process, and conducting the within purportedly more narrow review as to "protection of historic" properties, I would ask that you consider the overall cumulative impact of the proposal, and also consider conducting more tests for pilot environmental projects, and an exhaustive environmental study, prior to moving forward. The current proposals are simply too much, too fast, and unsupported by a realistic cost benefit analysis.

The thorough environmental assessment necessary, should immediately be undertaken prior to any further investment of time, resources and the bureaucracy itself. Such an exhaustive study would include, but certainly not be limited to, a complete review of the cumulative impacts, upon all the vast areas of public lands, off the New Jersey Coast, which have already been sold off, yet have similarly not yet been fully studied, and certainly, not developed.

These numerous impacts should therefore, initially, be thoroughly reviewed, before such a totally unvetted experimental technology is the subject matter of virtually irreversible actions. Included in such a non-exhaustive list of the potential impacts, to be first thoroughly reviewed and investigated, as to the specific Attentive Energy itself, as well as from a cumulative standpoint, as to all sites off of New Jersey, as with respect to all the other Ocean parcels already awarded, following:

- 1. The habitat for birds, fish and marine mammals both in the water, as well as the wetlands, and in other coastal areas of our State.
- 2. Commercial fishery sites, as well as the interests, of recreational fishing.
- 3. Air quality and water quality, and the specific effects, such a massive industrial construction project itself, would have, as well as the on-going operation of the vast wind turbines, and the ultimate not even explained process of trying to decommission or dismantle this massive industrial site, once its useful life has ended, or, it has been rendered obsolete, by the already ongoing development, of more efficient technologies.
- 4. Issues of environmental standing, and environmental justice, as to the Atlantic Ocean itself, and the ocean environment.
- 5. The cumulative effect upon navigation and ocean vessel traffic in this busy commercial corridor, which is already the subject matter of numerous potentially conflicting uses.
- 6. The interests, of public recreation, and tourism.
- 7. The visual effects and indeed, visual resources, ϕ f the coastal and the ocean setting, in the vicinity of this massive industrial site.
- 8. Independent of the overall effects upon mammals, marine, and bird wildlife, this massive untested industrial construction project, has the potential for causing a devasting impact upon threatened endangered species, including the extremely endangered North Atlantic Right Whale. The Right Whale frequents this gigantic ocean area in question, and may indeed, be crowded out, and pushed aside, from some of the already leased ocean lands, subject to the prior rapid bidding process, and awards, through BOEM.

Further, from a procedural, as well as a substantive standpoint, I would hereby strongly object to the manner in which BOEM has conducted the pending leasing process, which contemplates an award, for offshore wind farm sites, prior to a complete environmental assessment of this vast area, as well as the cumulative impacts of the already awarded leased sites, off the New Jersey Coast. Initially, I object to the inadequate, and far too short, time period, during which residents, public interest groups, and elected officials, have had the opportunity to have commented on this most recent leasing of 800,000 additional acres in the New York/New Jersey Bight Region. Rather than utilizing the all too convenient cover of the on-going COVID-19 Crisis, BOEM officials should have conducted, and still should consider, holding in-person public hearings in the affected geographic areas of the New Jersey Coast.

Further, BOEM representatives have exhibited an arguably expressed, and certainly, a subconscious, desire, to discount the interests of the State of New Jersey, its citizens, and numerous stakeholders, by inappropriately labeling the entire \$800,000 area to be leased out, as situated, in the "NY Bight". The most affected geographic area includes the precious and valuable New Jersey Coast, (emphasis added), which is far more affected, than more distant areas of New York State.

Just as the State of New Jersey, and this particular significant area of the Atlantic Ocean had previously been the subject matter of numerous dump sites, proposed industrialization, and wood burning, once again, our magnificent State is being dumped on, with the interests of our citizens being severely discounted, if not ignored. The State of New Jersey, and its citizens have become collateral damage, due to this juggernaut of inadequately researched, "feel-good" experimentation, whose potentially devasting and lasting impacts, become generational, and irreversible.

Additionally, from a procedural standpoint, I would hereby object to this ongoing process, as BOEM has failed to follow its own rules and regulations, including those expressly and inferentially, barring the issuance of a proposed sale notice for said leases, prior to any draft environmental assessment being provided for public comment.

Most importantly, I would hereby ask that BOEM rescind this entire process, which in all likelihood is violative of the statutory guidelines provided by the National Environmental Policy Act (NEPA).

On the merits, I would also join in other comments spread upon the record, by the Clean Ocean Action Organization, and other environmental ocean groups, all of whom have pointed out the significant paucity of information, in a draft environmental assessment, from a scientific and environmental perspective, as to the entire ocean ecosystem. It is therefore absolutely critical, that a comprehensive environmental assessment be undertaken, which would facilitate BOEM's understanding of the need for ecological and scientific baselines, so as to observe protections for bio-diversity of all species, as well as the entire ocean ecosystem.

Of particular concern, and contrary to at least one of the comments made on the record in the October 21st public meeting, before BOEM, in which one individual discounted critically endangered species, I would again point out the extremely vulnerable nature of the approximately 350 North Atlantic Right Whales left in the entire world. The potentially devasting impact of the vast industrialization project itself, and its on-going adverse effects, from a noise perspective, and otherwise, would be set in irreversible motion by the ongoing operation of the wind turbines themselves.. The draft environmental statement does not recognize legal and moral standing, of such an invaluable threatened species, whose inspirational value, beauty, and potential worth, as to the bio-diversity of our planet, and to life itself, cannot be overstated. It is "not a stretch", when one considers the absolutely critical and extremely valuable nature of medicines, derived from another New Jersey Coast creature, the Horseshoe Crab,

whose serum is utilized in saving countless human lives. To discount, undervalue, if not ignore, the value of a critically endangered species shuts off forever, the potential hypothetical contribution of that species to the furtherance of mankind, bio-diversity, and to all life. As such, I object, in the most vehement terms possible, to that one particular comment already spread upon the record, at the aforesaid October 21st public meeting.

Most importantly, I echo the sentiments of many scientists who have commented upon the lack of meaningful scientific data, studies and pilot projects, and other research, as to the potentially negative cumulative impacts of the development of these huge industrial, offshore, wind farms, and the impacts the construction of their associated infrastructure, may have on all marine resources, New Jersey's coastal economy, the tourism industry, our fishing industry, and the quality of life, at the New Jersey shore.

In particular, I join in the well-reasoned comments of the Clean Ocean Action Organization previously communicated to BOEM, as to the cumulative impacts upon marine mammals and fish, an industrial wind farm project may cause. In this regard, the vast impact of noise upon marine mammal life, and fisheries, during the construction phase, the actual operation and maintenance of the massive wind turbines, and the barely explored decommissioning of same, have all been severely discounted, if not ignored. True science would dictate all of these potential impacts be thoroughly studied and monitored, through a comprehensive long-term review process, rather than being subject to a rush to judgment, of the award of leases, and the inevitable noise and environmental degradation generated by the impactful construction process ahead. The economic vitality of the Jersey Shore, and our entire region, is at issue.

As such, I would urge BOEM thoroughly, to consider numerous reasonable alternatives, including but not limited to more readily achievable, already vetted, faster, and safer, on-shore, land based alternatives. From a best case scenario, the projected date of completion for already leased sites, to make operational the massive industrial wind farm facilities, targets the year 2035. Even this hypothetical time table does not take into account the inevitable impact from at least one devastating hurricane. The most rapid and efficient efforts to achieve energy efficiency, and the conservation of resources, entail land based solutions, which will reduce and mitigate the effects of global warming, and, not again run the risk of making the precious ocean, at the Jersey Shore, a dumping ground.

The current wind farm construction proposals, also minimize, if not ignore the fact that the proposed location of the lease areas, for these massive industrial sites, occurs in one of the prime hurricane zones, which has been subject to ever worsening storms, over the last decade. What effects, have been studied, as to the impact of locating these gigantic wind turbines in highly congested shipping lanes, thereby creating navigational obstacles and hazards? With the potential for even one inevitable catastrophic storm event, has scientific review, or evaluation been applied as to hypothetical environmental mishaps, if not total environmental disasters? The full range

of scientific, inquiry, including establishing sound diversity and ecosystem baselines, engaging in historic projected pilot studies of the full range of impacts upon ecological, fishing, coastal economy and all ocean resources, is called for. Such science must also be applied, in light of the sustainable seafood resource this particular region of the world presents literally, to feed millions of people, on a yearly basis!

Solid science is needed----not sound bites.

Accordingly, I would ask your agency to deny any pending application from Attentive Energy, LLC, (AE) for authorization to take marine mammals, described as "incidental," to marine site characterization surveys in the coastal waters off of New Jersey, and New York, in the New York Bight. Instead, I would ask that your agency support the implementation of a "no action alternative," on the application, and thereby allow the implementation of a moratorium of any and all further preconstruction, construction activities, and the review process itself, until independent, scientific investigation has taken place to address numerous unanswered questions. Included in these inadequately addressed issues, would be the fact that that no investigation has occurred, as to the all too coincidental recent deaths of whales, and other marine mammals, which occurred concurrently with preconstruction sound surveys, and to the underwater noise,

generated by acoustic vessels immediately off of out coast.

Thank you for your consideration.

Very truly yours,

Mayor John A. Peterson, Jr.

JAP/ks

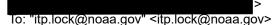
c. Sandra Martin, Clerk (via email only), for distribution to Members of the Seaside Park Borough Council, for informational purposes only Karen Kroon, Seaside Park Administrator vi email only



ITP Lock - NOAA Service Account <itp.lock@noaa.gov>

(no subject)

1 message



Mon, May 22, 2023 at 7:55 PM

Jolie Harrison,

I am opposed to the harassment of marine animals for the survey work of Attentive Energy.

9,086?? Not ONE should be sacrificed for this inefficient energy farce.

WE ARE NOT DENMARK!! This is New Jersey, with between 800,.000 and 1 million salt water anglers in comparison to Denmark's 300,000.

A few days ago, a young healthy humpback beached in NY, 4 dolphins and a porpoises in NJ. We are at 40 whales and at least 50 dolphins. THAT WE KNOW. I'm told NOAA is disposing??????

If this doesn't make you cry, check your pulse. And if NOAA and its employees sanction this, get ready for that karma. It's real.

Carolyn Kaschak Bay Head NJ



ITP Lock - NOAA Service Account <itp.lock@noaa.gov>

Attentive Energy, LLC Marine Site Characterization Surveys off New Jersey and New York (2023)

1 message

Wed, May 17, 2023 at 1:06 PM

To: ITP.lock@noaa.gov

Cc: Elizabeth Quattrochi <eequat@gmail.com>

Comment Submitted by Elizabeth Quattrochi eequat@gmail.com



Attentive Wind Take Authorization comment.5.22.docx 528K

To Jolie Harrison. Chief, Permits and Conservation Division 5/17/23

Comments should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service and should be submitted via email to ITP.clevenstine@noaa.gov.

Attentive Energy, LLC Marine Site Characterization Surveys off New Jersey and New York (2023)

Coexistence between offshore wind and our marine mammals is clearly not the plan.

I am stunned by the cold-hearted methodical reissuance of new takes while dead bodies of whales and dolphins wash up on shore without explanation.

More information is becoming publicly available revealing the performance of federal agencies charged with protecting the "health and stability" of our ocean ecosystem.

Do you hear our voices:

1. Save Right Whale Coalition- Whistleblower Statement - Offshore Wind will drive whales to extinction (Dec 4, 2022)

https://saverightwhales.org/media/open-letter-offshore-wind-will-drive-whales-to-extinction?fbclid=lwAR2wrnJpzovxmOt222btFYKlFf11OVx_lpZsMjFPX2XrJHEai8tOmyu4D-Y&mibextid=S66gvF

2. CFACT Evidence says Offshore Wind is killing lots of whales (January 23, 2023)

https://www.cfact.org/2023/01/23/evidence-says-offshore-wind-development-is-killing-lots-of-whales/?fbclid=IwAR1mVWM2Hr2TwTtrO0tNyURQcFAO9Uq2e6h8Ufd5dsruapmKWQqA8XjxLKY

3. MSM - Martha MacCallum Fox (May 8, 2023)

Exposes NGOs that have taken money from the foreign Offshore Wind companies (including Audubon). Is this why they are so quiet? Where are our NGOs?

https://www.facebook.com/sylvia.guillodlockwood/videos/1323690578214225/? cft [0]=AZ XWiLnJsha4pHFLAXdK6XJAHyo5aCj ZrD1V8SPBCIJnHZvv3KvdkCRJ2Ro0gSyfjD8L93WRbn1MhUZ qh4AIl2K0UZBsJxKU-

 $\underline{ \tt q1jbcZHlBSxTGEtD0hWYWgZHk321BnDHwUdiB0BJh559CZWJz7aOLoFY3K0mThv3HqVE97bGbzs} \\ \underline{ \tt w\& tn = R]-R}$

Did you read this report? There is a total disconnect between the threats outlined in the report and the policy decision to hurry the industrialization of our ocean.

NOAA's March 2023 "Synthesis of Science" memorandum lays out "major knowledge gaps" that require "an enormous amount of research" to understand the "habitat modification" caused by offshore wind development. Note the negative impact to plankton, which contributes 50-80% of the oxygen we breathe. https://repository.library.noaa.gov/view/noaa/49151

I have attached a grid prepared by a private citizen showing the total takes or kills authorized of 24 OFFSHORE LEASES (Massachusetts to Virginia). Based on these totals, the administration of the Marine Mammal Protection Act (MMPA) has been perverted beyond any reasonable interpretation.

The numbers authorized are not "small numbers" which is a condition of a permit. The number of takes for the critically endangered Right Whale exceeds the number of North Atlantic Right Whales alive on this planet.

In a healthy population, courts have interpreted a "small number" to fall somewhere under 10% of the population. So far, the takes granted against the critically endangered North Atlantic Right Whale exceed 102% of their population of fewer than 350 whales.

Do not rebut me by saying each location and each time period gets a fresh start on numbers; these are the same 350 whales migrating up the coast from Florida to Maine, through all these locations. There's no clock reset or fresh start for them; there are no artificial boundaries by state or lease for them.

Do not rebut me by saying "no evidence." That political narrative is debunked, put forth by the Marine Mammal Commission, comprised of Biden's political appointees.

The total takes authorized as of this writing for marine mammals is 178,039. Imagine that much suffering. It's a betrayal to the Marine Mammal Protection Act and all its principles.

The same cruelty inflicted on whales during centuries of whaling is back. Two hundred years ago people needed blubber oil for candles. Now it seems our government "needs" the sea to generate electricity. Now a federal agency designed to protect them is failing its very reason to exist.

INCIDENTAL TOTAL TAKES OF KILLS OF 24 OCS-A LEASES						
TOTAL STOCK SIZE OF SPECIES	TOTAL OF ALL LEASE TAKES	TOTAL % OF STOCK SIZE				
6,802	691	10.16%				
1,396	745	53.37%				
21,968	1,308	5.95%				
338	348	102.99%				
6,292	136	2.16%				
412	21	5.10%				
37,208	3,249	8.73%				
13,844	1,196	8.64%				
4	11					
	2.427					
		5.35%				
100000000000000000000000000000000000000		7.49%				
		14.079				
		92.029				
		35.639				
		42.399				
		2.949				
		12.979				
- Contraction	The state of the s	2.299				
		8.539				
525,868	124,727	23.72%				
95,543	11,957	12.51%				
1						
27 300	15.838	58.029				
		36.319				
01,030	22,203	50.517				
88,636	38,107	42.999				
747,255	178,039	23.839				
	1/8/13/9	7.5 H.39				
	6,802 1,396 21,968 338 6,292 412 37,208 13,844 39,921 93,233 62,851 6,639 69,490 172,974 39,215 1,981 35,215 4,349 525,868 95,543	TOTAL STOCK SIZE OF SPECIES 6,802 691 1,396 745 21,968 1,308 338 348 6,292 136 412 21 37,208 3,249 13,844 1,196 39,921 2,137 93,233 6,981 62,851 8,840 6,639 6,109 69,490 24,757 172,974 73,316 39,215 1,152 1,981 257 35,215 806 4,349 371 525,868 124,727 95,543 11,957				



ITP Lock - NOAA Service Account <itp.lock@noaa.gov>

Re: NO KILLING OF MARNE LIFE IN NY BIGHT - STOP THE SLAUGHTER WITH SHIPS AND CABLES AND POISON, ETC.

1 message

Sun, Apr 30, 2023 at 8:54 PM

To: itp.lock@noaa.gov, tom.kean@mail.house.gov, jeff.vandrew@mail.house.gov, info@mercyforanimals.org, foe@foe.org

public commetn on federal register

i definitely am opposed to killing whales, dolphins and all animals in the ny nj bight due to this profiteer wants tot take more away from Ife on earth. this is human selfishness and greed that will not let any site be peaceful and tranquil but for allowing profiteers to selfishly, greedily kill marine life. the whales and dolphins alreayd have to contend with fishing boats and ships from china with their crap. it is time to stop this further destruction ofthis darea with sonar and geoengineering and birds ding from teh wind towers and the whales dying. this is a real anti environmental destructive plan. nothing will be alive anymnore. we need to stop this horrorcoming. this comment is for the public record. enough is enough. stop this govgt caused horror. it is not necessary. it is not wanted. stop it., this commetn is for the public record. please receitp.jean pbuliee jeanpublic1@gmail.com

On Sat, Apr 22, 2023 at 11:47 AM barbara sachau

bsachau@gmail.com wrote:

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[Federal Register Volume 88, Number 77 (Friday, April 21, 2023)]
[Notices]
[Pages 24553-24573]
From the Federal Register Online via the Government Publishing Office [www.gpo.gov]
[FR Doc No: 2023-08504]

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
[RTID 0648-XC805]

Takes of Marine Mammals Incidental to Specified Activities;
Taking Marine Mammals Incidental to Marine Site Characterization
Surveys in the New York Bight

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice; proposed incidental harassment authorization; request for comments on proposed authorization and possible renewal.
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SUMMARY: NMFS has received a request from Attentive Energy, LLC (AE) for authorization to take marine mammals incidental to marine site characterization surveys in coastal waters off of New York and New Jersey in the New York Bight, specifically within the Bureau of Ocean Energy Management (BOEM) Commercial Lease of Submerged Lands for Renewable Energy Development on the Outer Continental Shelf (Lease) Area OCS-A 0538 and associated export cable route (ECR) area. Pursuant to the Marine Mammal Protection Act (MMPA), NMFS is requesting comments on its proposal to issue an incidental harassment authorization (IHA) to incidentally take marine mammals during the specified activities. NMFS is also requesting comments on a possible one-time, one-year renewal that could be issued under certain circumstances and if all requirements are met, as described in Request for Public Comments at the end of this notice. NMFS will consider public comments prior to making any final decision on the issuance of the requested MMPA authorization and agency responses will be summarized in the final notice of our decision.

DATES: Comments and information must be received no later than May 22, 2023.

ADDRESSES: Comments should be addressed to Jolie Harrison, Chief, Permits and Conservation Division, Office of Protected Resources, National Marine Fisheries Service and should be submitted via email to ITP.lock@noaa.gov.

Instructions: NMFS is not responsible for comments sent by any other method, to any other address or individual, or received after the end of the comment period. Comments, including all attachments, must not exceed a 25-megabyte file size. All comments received are a part of the public record and will generally be posted online at

www.fisheries.noaa.gov/permit/incidental-take-authorizations-under-marine-mammal-protection-act without change. All personal identifying information (e.g., name, address) voluntarily submitted by the

information (e.g., name, address) voluntarily submitted by the commenter may be publicly accessible. Do not submit confidential business information or otherwise sensitive or protected information.

FOR FURTHER INFORMATION CONTACT: Karolyn Lock, Office of Protected Resources, NMFS, (301) 427-8833. Electronic copies of the application and supporting documents, as well as a list of the references cited in this document, may be obtained online at: https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable. In case of problems accessing these documents, please call the contact listed above.

SUPPLEMENTARY INFORMATION:

Background

The MMPA prohibits the ``take'' of marine mammals, with certain exceptions. Sections 101(a)(5)(A) and (D) of the MMPA (16 U.S.C. 1361

et seq.) direct the Secretary of Commerce (as delegated to NMFS) to allow, upon request, the incidental, but not intentional, taking of small numbers of marine mammals by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and either regulations are proposed or, if the taking is limited to harassment, a notice of a proposed IHA is provided to the public for review.

Authorization for incidental takings shall be granted if NMFS finds that the taking will have a negligible impact on the species or stock(s) and will not have an unmitigable adverse impact on the availability of the species or stock(s) for taking for subsistence uses (where relevant). Further, NMFS must prescribe the permissible methods of taking and other ``means of effecting the least practicable adverse impact'' on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stocks for taking for certain subsistence uses (referred to in shorthand as ``mitigation''); and requirements pertaining to the mitigation, monitoring and reporting of the takings are set forth. The definitions of all applicable MMPA statutory terms cited above are included in the relevant sections below.

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National Environmental Policy Act

To comply with the National Environmental Policy Act of 1969 (NEPA; 42 U.S.C. 4321 et seq.) and NOAA Administrative Order (NAO) 216-6A, NMFS must review our proposed action (i.e., the issuance of an IHA) with respect to potential impacts on the human environment.

This action is consistent with categories of activities identified in Categorical Exclusion B4 (IHAs with no anticipated serious injury or mortality) of the Companion Manual for NOAA Administrative Order 216-6A, which do not individually or cumulatively have the potential for significant impacts on the quality of the human environment and for which we have not identified any extraordinary circumstances that would preclude this categorical exclusion. Accordingly, NMFS has preliminarily determined that the issuance of the proposed IHA qualifies to be categorically excluded from further NEPA review.

We will review all comments submitted in response to this notice prior to concluding our NEPA process or making a final decision on the IHA request.

Summary of Request

On December 28, 2022, NMFS received a request from AE for an IHA to take marine mammals incidental to conducting marine site characterization surveys in coastal waters off of New York and New Jersey in the New York Bight, specifically within the BOEM Lease Area OCS-A 0538 and associated ECR area. Following NMFS' review of the application, the application was deemed adequate and complete on February 22, 2023. AE's request is for take of small numbers of 15

species (16 stocks) of marine mammals by Level B harassment only. Neither AE nor NMFS expect serious injury or mortality to result from this activity and, therefore, an IHA is appropriate.

Description of Proposed Activity

Overview

AE proposes to conduct marine site characterization surveys, including high-resolution geophysical (HRG) surveys, in coastal waters off of New Jersey and New York in the New York Bight, specifically within the BOEM Lease Area OCS-A 0538 and associated ECR area.

The planned marine site characterization surveys are designed to obtain data sufficient to meet BOEM guidelines for providing geophysical, geotechnical, and geohazard information for site assessment plan surveys and/or construction and operations plan development. The objective of the surveys is to support the site characterization, siting, and engineering design of offshore wind project facilities including wind turbine generators, offshore substations, and submarine cables within the Lease Area. Up to two vessels may conduct survey efforts concurrently. Underwater sound resulting from AE's marine site characterization survey activities, specifically HRG surveys, have the potential to result in incidental take of marine mammals in the form of Level B harassment.

Dates and Duration

The proposed survey is planned to begin no earlier than May 1, 2023 and estimated to require 201 survey days across a maximum of two vessels operating concurrently within a single year. A ``survey day'' is defined as a 24-hour (hr) activity period in which active acoustic sound sources are used. It is expected that each vessel would cover approximately 170 kilometers (km) per day based on the applicant's expectations regarding data acquisition efficiency, and there is up to 21,745 km (13,512 miles) of track line of survey effort planned; 14,025 km in the Lease Area and 7,720 km in the ECR Area. The IHA would be effective for 1 year from the date of issuance.

Specific Geographic Region

AE's survey activities would occur in coastal waters off of New York and New Jersey in the New York Bight, specifically within Lease Area OCS-A 0538 and the associated ECR area (Figure 1). The Survey Area (i.e., the Lease Area and ECR) is between 1 and 65 meters (m) in water depth. The Lease Area does not include water depths below 30 m, only portions of the ECR Area does (Figure 2).

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[GRAPHIC] [TIFF OMITTED] TN21AP23.003

[[Page 24556]]

[GRAPHIC] [TIFF OMITTED] TN21AP23.004

Detailed Description of Specified Activity

AE's marine site characterization surveys include HRG surveys and geotechnical sampling activities within the Lease Area and the ECR area. The total HRG survey tracklines for the Survey Area is 21,745 km, with 14,025 km in the Lease Area and 7,720 km in the ECR Area. The geotechnical sampling activities, including use of vibracores and seabed core penetration tests, would occur during the same period as the HRG survey activities and would use an additional survey vessel. NMFS does not expect geotechnical sampling activities to present reasonably anticipated risk of causing incidental take of marine mammals, and these activities are not discussed further in this notice.

AE proposes HRG survey operations to be conducted continuously 24 hours $\,$

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a day. Based on 24-hour operations, the estimated total duration of the activities would be approximately 201 survey days across a maximum of two concurrently-operating vessels. The survey days are proposed to occur any month throughout the year as the exact timing of the surveys during the year is not yet certain.

The only acoustic sources planned for use during HRG survey activities proposed by AE with expected potential to cause incidental take of marine mammals are the sparker and boomer. Sparkers and boomers are medium penetration, impulsive sources used to map deeper subsurface stratigraphy. Sparkers create omnidirectional acoustic pulses from 50 Hz to 4 kHz, are typically towed behind the vessel, and may be operated with different numbers of electrode tips to allow tuning of the acoustic waveform for specific applications. The sparker system planned for use is the Dual Geo-Spark 2000X (400 tip/800 J). A boomer is a broadband source operating in the 3.5 Hz to 10 kHz frequency range. The boomer system planned for use is the Geo-Boomer 300-500.

Crocker and Fratantonio (2016) did not provide data for the Dual Geo-Spark 2000X but did measure a similar system (Applied Acoustics Dura-Spark). However, measurements for the Applied Acoustics Dura-Spark did not provide data for an energy setting near 800 J (for a 400-tip configuration, Crocker and Fratantonio (2016) provide measurements at 500 and 2,000 J). Therefore, AE proposes to use this sparker as proxy, at 500 J setting, as it is the closest match to the Dual Geo-Spark 2000X because of the similarities in composition and operation, with both employing up to 400-electrode tips. Similarly, no data are provided by Crocker and Fratantonio (2016) for the Geo-Boomer 300-500. However, a similar system (the Applied Acoustics S-Boom) is included in Crocker and Fratantonio (2016) and values were included for a dual plate, 500 J setting. Therefore, AE proposes to use this boomer as proxy as it is the closest match to the Geo-Boomer 300-500 because of

the similarities in composition and operation, with input signal at a similar or higher energy range (100-700). NMFS concurs with these selections, which are described in Table 1.

The only acoustic sources planned for use during HRG survey activities proposed by the applicant with expected potential to cause incidental take of marine mammals are the boomer and sparker. Therefore, we will only be discussing further equipment that has the potential to harass marine mammals and is listed below in Table 1. For equipment source level specifications noted in Table 1, proxies representing the closest match in composition and operation of the Dual Geo-Spark 2000X (sparker) and Geo-Boomer 300-500 (boomer) were used from Crocker and Fratantonio (2016).

AE's surveys will likely use a combination of the boomer and sparker. However, AE has requested authorization of take based on an assumption that the sparker would be used during all survey effort as it produces a greater distance to the 160 dB root mean square (rms) threshold for acoustic impacts (see application's Table 1-3 and Section 6.1).

Table 1--Representative Survey Equipment Expected To Result in Take of Marine Mammals

_		Operating	Source level	Source level	Sound exposure	
Pulse	Beam	_				
Equipment type duration Repetition	Proxy equipment make/ width	frequency	(RMS dB	(peak dB	level (dB re 1	Reference
•	model	(kHz)	re 1 uPa	re 1 uPa	uPa[supcaret]2*s)	
(ms) rate (Hz)	(degrees)	, ,				
			@1m)	@1m)		
Medium SBP-Boomer 0.70 1.4	Applied Acoustics S- 76	5.5	202	213	170	Crocker and
	Boom 500J (boomer).					Fratantonio 2016.
Medium SBP-Sparker 1.1 4	Applied Acoustics 180	0.3-1.2	203	211	174	Crocker and
	Dura-spark (400 tip/ 500 to 2,000 J) (sparker).					Fratantonio 2016.

Operation of the following additional survey equipment types is not reasonably expected to result in take of marine mammals and will not be discussed further beyond the brief summaries provided below.

Non-impulsive, parametric sub-bottom profilers (SBPs) are used for providing high data density in sub-bottom profiles that are typically required for cable routes, very shallow water, and archaeological surveys. These sources generate short, very narrow-beam (1[deg] to 3.5[deg]) signals at high frequencies (generally around 85-115 kHz). The narrow beamwidth significantly reduces the potential that

a marine mammal could be exposed to the signal, while the high frequency of operation means that the signal is rapidly attenuated in seawater (and cannot be heard by mysticetes). These sources are typically deployed on a pole rather than towed behind the vessel.

Magnetic intensity measurements (gradiometer) are used for detecting local variations in regional magnetic field from geological strata and potential ferrous objects on and below the bottom. The proposed gradiometer has operating frequencies greater than 180 kHz and is therefore outside the general hearing range of marine mammals.

Multibeam echosounders (MBESs) are used to determine water depths and general bottom topography. The proposed MBESs all have operating frequencies greater than 180 kHz and are therefore outside the general hearing range of marine mammals.

Side scan sonars (SSS) are used for seabed sediment classification purposes and to identify natural and manmade acoustic targets on the seafloor. The proposed SSSs all have operating frequencies greater than 180 kHz and are therefore outside the general hearing range of marine mammals.

Proposed mitigation, monitoring, and reporting measures are described in detail later in this document (please see Proposed Mitigation and Proposed Monitoring and Reporting).

Description of Marine Mammals in the Area of Specified Activities

Sections 3 and 4 of the application summarize available information regarding status and trends, distribution and habitat preferences, and behavior and life history of the potentially affected species. NMFS fully considered all of this information, and we refer the reader to these descriptions, incorporated here by reference, instead of reprinting the information. Additional information regarding population trends and threats may be found in NMFS' Stock Assessment Reports (SARs; www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments) and more general information about

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these species (e.g., physical and behavioral descriptions) may be found on NMFS' website (https://www.fisheries.noaa.gov/find-species).

Table 2 lists all species or stocks for which take is expected and proposed to be authorized for this activity and summarizes information related to the species or stock, including regulatory status under the MMPA and Endangered Species Act (ESA) and potential biological removal (PBR), where known. PBR is defined by the MMPA as the maximum number of animals, not including natural mortalities, that may be removed from a marine mammal stock while allowing that stock to reach or maintain its optimum sustainable population (as described in NMFS' SARs). While no serious injury or mortality is anticipated or proposed to be authorized here, PBR and annual serious injury and mortality from anthropogenic sources are included here as gross indicators of the status of the species or stocks and other threats.

Marine mammal abundance estimates presented in this document represent the total number of individuals that make up a given stock or

the total number estimated within a particular study or survey area.

NMFS' stock abundance estimates for most species represent the total
estimate of individuals within the geographic area, if known, that
comprises that stock. For some species, this geographic area may extend
beyond U.S. waters. All MMPA managed stocks in this region are assessed
in NMFS' U.S. Atlantic and Gulf of Mexico SARs. All values presented in
Table 2 are the most recent available at the time of publication (draft
2022 SARs) and are available online at: https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stockassessments).

assessments).					
			d Stocks Likely Impacted		ctivities
(CV, Common name recent PBR A	Annual M/SI	Scientific name	Stock	ESA/MMPA status; strategic (Y/N) \1\	Nmin, most
		Order Artiodacty	laInfraorder Cetacea	Mysticeti (baleen w	
North Atlantic right what 2020) 0.7		Eubalaena glacialis	Western Atlantic Stock	E/D, Y	338 (0; 332;
Humpback whale		Megaptera novaeangliae	Gulf of Maine	-/-; Y	1,396 (0; 1,380;
Fin whale	1.8	Balaenoptera physalus.	Western North Atlantic	E/D, Y	6,802 (0.24;
Sei whale		Balaenoptera borealis.	Stock. Nova Scotia Stock	E/D, Y	2016). 6,292 (1.02;
Minke whale	10.6	Balaenoptera	Canadian East Coastal	-/-, N	2016). 21,968 (0.31;
		acutorostrata. 	Stock.		2016).
			(toothed whales, dolphi		
Sperm whale		Physeter macrocephalus	North Atlantic Stock	E/D, Y	4,349 (0.28;
Long-finned pilot whale. 30,627; 306	9	Globicephala melas	Western North Atlantic	-/-, N	2016). 39,215 (0.3;
Atlantic white-sided dol 54,443; 544	phin 27	Lagenorhynchus acutus.	Stock. Western North Atlantic	-/-, N	2016). 93,233 (0.71;
Bottlenose dolphin		Tursiops truncatus	Stock. Western North Atlantic	-/-, N	2016). 62,851 (0.23;

51,914; 519	28				
2-,2,	20		Offshore Stock.		2016).
Bottlenose dolphin4,759; 48	12.2-21.5	Tursiops truncatus	Northern Migratory	-/D, Y	6,639 (0.41;
			Coastal.		2016).
Common dolphin	• • • • • • • • •	Delphinus delphis	Western North Atlantic	-/-, N	172,974 (0.21,
•			Stock.		145,216, 2016)
Atlantic spotted dolphin 32,032; 320	0	Stenella frontalis	Western North Atlantic	-/-, N	39,921 (0.27;
,			Stock.		2016).
Risso's dolphin	34	Grampus griseus	Western North Atlantic	-/-, N	35,215 (0.19;
			Stock.		2016).
Harbor porpoise	164	Phocoena phocoena	Gulf of Maine/Bay of	-/-, N	95,543 (0.31;
			Fundy Stock.		2016).
			Order CarnivoraPinr	nipedia 	
Unaban and		Dhara witulian	Markaus Naukh Atlantia	/ N	61 226 (0.00)
Harbor seal	339	Phoca Vitulina	western North Atlantic	-/-, N	61,336 (0.08;
37,637, 1,729	339		Stock.		2018).
Gray seal \4\		Halichoerus grynus		-/ N	27,300 (0.22;
22,785; 1,458		8. Jpus		, ,	
, ,	•		Stock.		2016).

\1\ ESA status: Endangered (E), Threatened (T)/MMPA status: Depleted (D). A dash (-) indicates that the species is not listed under the ESA or

designated as depleted under the MMPA. Under the MMPA, a strategic stock is one for which the level of direct human-caused mortality exceeds PBR or

which is determined to be declining and likely to be listed under the ESA within the foreseeable future. Any species or stock listed under the ESA is

automatically designated under the MMPA as depleted and as a strategic stock.

\2\ NMFS marine mammal stock assessment reports online at: www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-stock-assessments. CV

is the coefficient of variation; Nmin is the minimum estimate of stock abundance. In some cases, CV is not applicable. \3\ These values, found in NMFS' SARs, represent annual levels of human-caused mortality plus serious injury from all sources combined (e.g., commercial

fisheries, ship strike).

\4\ NMFS' stock abundance estimate (and associated PBR value) applies to the U.S. population only. Total stock abundance (including animals in Canada)

is approximately 451,600. The annual mortality and serious injury (M/SI) value given is for the total stock.

As indicated above, all 15 species (16 stocks) in Table 2 temporally and spatially co-occur with the proposed activity to the degree that take is reasonably likely to occur. While other species have been documented in the area (see application Section 3--Table 1), the temporal and/or spatial occurrence of these species is such that

take is not expected to occur and they are not discussed further beyond the explanation provided here.

North Atlantic Right Whale

North Atlantic right whales (NARW) range from calving grounds in the southeastern United States to feeding grounds in New England waters and into Canadian waters (Hayes et al., 2018). They are observed year round in the Mid-Atlantic Bight, and surveys have demonstrated the existence of seven areas where NARWs congregate seasonally in Georges Bank, off Cape Cod, and in Massachusetts Bay (Hayes et al., 2018). In the late fall months (e.g., October), NARWs are generally thought to depart from the feeding grounds in the North Atlantic and move south to their calving grounds off Georgia and Florida. However, recent research indicates our understanding of their movement patterns remains incomplete (Davis et al., 2017). A review of passive acoustic monitoring data from 2004 to 2014 throughout the western North Atlantic demonstrated nearly continuous year-round NARW presence across their entire habitat range (for at

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least some individuals), including in locations previously thought of as migratory corridors, suggesting that not all of the population undergoes a consistent annual migration (Davis et al., 2017). Given that AE's surveys would be concentrated offshore in the New York Bight, some NARWs may be present year round. However, the majority of NARWs in the vicinity of the survey areas are likely to be transient, migrating through the area.

Recent aerial surveys in the New York Bight showed NARW in the proposed survey area in the winter and spring, preferring deeper waters near the shelf break (NARW observed in depths ranging from 33-1,041m) but were observed throughout the survey area (Normandeau Associates and Association of Professional Energy Managers (APEM), 2020; Zoidis et al., 2021). Similarly, passive acoustic data collected from 2018 to 2020 in the New York Bight showed detections of NARW throughout the year (Estabrook et al., 2021). Seasonally, NARW acoustic presence was highest in the fall. NARW can be anticipated to occur in the proposed survey area year-round but with lower levels in the summer from July-September.

Since 2010, the NARW population has been in decline (Pace et al., 2017), with a 40 percent decrease in calving rate (Kraus et al., 2016). In 2018, no new NARW calves were documented in their calving grounds; this represented the first time since annual NOAA aerial surveys began in 1989 that no new NARW calves were observed. Calf numbers have increased since 2018 with 20 NARW calves documented in 2021 and 15 in 2022.

Elevated NARW mortalities have occurred since June 7, 2017, along the U.S. and Canadian coast. This event has been declared an Unusual Mortality Event (UME), with human interactions, including entanglement in fixed fishing gear and vessel strikes, implicated in at least 60 of the mortalities or serious injuries thus far. As of April 4, 2023, a

total of 98 confirmed cases of mortality, serious injury, or morbidity (sublethal injury or illness) have been documented. The preliminary cause of most of these cases is from rope entanglements or vessel strikes. More information is available online at: https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2023-north-atlantic-right-whale-unusual-mortality-event.

The proposed survey area is within a migratory corridor Biologically Important Area (BIA) for NARWs that extends from Massachusetts to Florida (LeBrecque et al., 2015). There is possible migratory behavior that could occur in this area between November and April. Off the coast of New Jersey, the migratory BIA extends from the coast to beyond the shelf break.

NMFS' regulations at 50 CFR part 224.105 designated nearshore waters of the Mid-Atlantic Bight as Mid-Atlantic U.S. Seasonal Management Areas (SMA) for NARWs in 2008. SMAs were developed to reduce the threat of collisions between ships and NARWs around their migratory route and calving grounds. The New York/New Jersey SMA, which occurs in the New York Bight, is in the proposed survey area and is active from November 1 through April 30 of each year. Within SMAs, the regulations require a mandatory vessel speed (less than 10 knots (kn) or 5.14 meters-per-second (m/s)) for all vessels greater than 65 ft (19.8 m).

On August 1, 2022, NMFS announced proposed changes to the existing NARW vessel speed regulations to further reduce the likelihood of mortalities and serious injuries to endangered NARWs from vessel collisions, which are a leading cause of the species' decline and a primary factor in an ongoing Unusual Mortality Event (87 FR 46921). Should a final vessel speed rule be issued and become effective during the effective period of this IHA (or any other MMPA incidental take authorization), the authorization holder would be required to comply with any and all applicable requirements contained within the final rule. Specifically, where measures in any final vessel speed rule are more protective or restrictive than those in this or any other MMPA authorization, authorization holders would be required to comply with the requirements of the rule. Alternatively, where measures in this or any other MMPA authorization are more restrictive or protective than those in any final vessel speed rule, the measures in the MMPA authorization would remain in place. The responsibility to comply with the applicable requirements of any vessel speed rule would become effective immediately upon the effective date of any final vessel speed rule and, when notice is published of the effective date, NMFS would also notify AE if the measures in the speed rule were to supersede any of the measures in the MMPA authorization such that they were no longer applicable.

Humpback Whale

On September 8, 2016, NMFS divided the once single species of humpback whales into 14 distinct population segments (DPS),\1\ removed the current species-level listing, and, instead, listed four DPSs as endangered and one DPS as threatened (81 FR 62259, September 8, 2016). The remaining nine DPSs were not listed. The West Indies DPS, which is not listed under the ESA, is the only DPS of humpback whale that is expected to occur in the survey area. Members of the West Indies DPS

disperse to multiple western North Atlantic feeding populations, including the Gulf of Maine stock designated under the MMPA. Whales occurring in the project area are considered to be from the West Indies DPS but are not necessarily from the Gulf of Maine stock. Barco et al. (2002) estimated that, based on photo-identification, only 39 percent of individual humpback whales observed along the mid- and south Atlantic U.S. coast are from the Gulf of Maine stock. Bettridge et al. (2015) estimated the size of this population at 12,312 (95 percent CI 8,688-15,954) whales in 2004-05, which is consistent with previous population estimates of approximately 10,000-11,000 whales (Stevick et al., 2003; Smith et al., 1999) and the increasing trend for the West Indies DPS (Bettridge et al., 2015).

\1\ Under the Endangered Species Act, in 16 U.S.C. 1532(16), a distinct population segment (or DPS) is a vertebrate population or group of populations that is discrete from other populations of the species and significant in relation to the entire species. NOAA Fisheries and the US Fish and Wildlife Service released a joint statement on February 7, 1996 (61 FR 4722) that defines the criteria for identifying a population as a DPS.

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Humpback whales utilize the mid-Atlantic as a migration pathway between calving/mating grounds to the south and feeding grounds in the north (Waring et al., 2007a; Waring et al., 2007b). A key question with regard to humpback whales off the Mid-Atlantic states is what feeding population whales in these waters belong to.

Since January 2016, elevated humpback whale mortalities have occurred along the Atlantic coast from Maine to Florida. Partial or full necropsy examinations have been conducted on approximately half of the 191 known cases (as of April 4, 2023). Of the whales examined, about 40 percent had evidence of human interaction, either ship strike or entanglement. While a portion of the whales have shown evidence of pre-mortem vessel strike, this finding is not consistent across all whales examined and more research is needed. NOAA is consulting with researchers that are conducting studies on the humpback whale populations, and these efforts may provide information on changes in whale distribution and habitat use that

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could provide additional insight into how these vessel interactions occurred. More information is available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2016-2023-humpback-whale-unusual-mortality-event-along-atlantic-coast.

Fin Whale

Fin whales are present north of 35-degree latitude in every season and are broadly distributed throughout the western North Atlantic for most of the year (Waring et al., 2016). They are typically found in small groups of up to five individuals (Brueggeman et al., 1987). The

main threats to fin whales are fishery interactions and vessel collisions (Waring et al., 2016).

The western north Atlantic stock of fin whales includes the area from Central Virginia to Newfoundland/Labrador Canada. This region is primarily a feeding ground for this migratory species that tend to calve and breed in lower latitudes or offshore. There is currently no critical habitat designated for this species.

Aerial surveys in the New York Bight observed fin whales year-round throughout the survey area, but they preferred deeper waters near the shelf break (Normandeau Associates and APEM, 2020). Passive acoustic data from 2018 to 2020 also detected fin whales throughout the year (Estabrook et al., 2021).

Sei Whale

The Nova Scotia stock of sei whales can be found in deeper waters of the continental shelf edge waters of the northeastern U.S. and northeastward to south of Newfoundland. Sei whales occur in shallower waters to feed. Currently there is no critical habitat for sei whales, though they can be observed along the shelf edge of the continental shelf. The main threats to this stock are interactions with fisheries and vessel collisions.

Aerial surveys conducted in the New York Bight observed sei whales in both winter and spring, though they preferred deeper waters near the shelf break (Normandeau Associates and APEM, 2020). Passive acoustic data in the survey area detected sei whales throughout the year except January and July with highest detections in March and April (Estabrook et al., 2021).

Minke Whale

Minke whales can be found in temperate, tropical, and high-latitude waters. The Canadian East Coast stock can be found in the area from the western half of the Davis Strait (45[deg] W) to the Gulf of Mexico (Waring et al., 2016). This species generally occupies waters less than 100-m deep on the continental shelf. There appears to be a strong seasonal component to minke whale distribution in the survey areas, in which spring to fall are times of relatively widespread and common occurrence while during winter the species appears to be largely absent (Waring et al., 2016). Aerial surveys in the New York Bight area found that minke whales were observed throughout the survey area with highest numbers sighting in the spring months (Normandeau Associates and APEM, 2020).

Since January 2017, elevated minke whale mortalities have occurred along the Atlantic coast from Maine through South Carolina, with a total of 142 strandings (as of March 23, 2023). This event has been declared a UME; as of 2023, it is pending closure. Full or partial necropsy examinations were conducted on more than 60 percent of the stranded whales. Preliminary findings in several of the whales have shown evidence of human interactions or infectious disease, but these findings are not consistent across all of the whales examined, so more research is needed. More information is available at: https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2023-

minke-whale-unusual-mortality-event-along-atlantic-coast.

Sperm Whale

The distribution of the sperm whale in the U.S. EEZ occurs on the continental shelf edge, over the continental slope, and into mid-ocean regions (Waring et al., 2014). They are rarely found in waters less than 300 m deep. The basic social unit of the sperm whale appears to be the mixed school of adult females, their calves, and some juveniles of both sexes, normally numbering 20-40 animals. There is evidence that some social bonds persist for many years (Christal et al., 1998). In summer, the distribution of sperm whales includes the area northeast of Georges Bank and into the Northeast Channel region, as well as the continental shelf (inshore of the 100-m isobath) south of New England. In the fall, sperm whales occur south of New England on the continental shelf at its highest level. In winter, sperm whales are concentrated east and northeast of Cape Hatteras, North Carolina.

Aerial studies in the New York Bight observed sperm whales in the highest number in the summer, with a preference for the shelf break (Normandeau Associates and APEM, 2020). Passive acoustic recordings of sperm whale recorded them throughout the year, and again highest during spring and summer (Estabrook et al., 2021).

Risso's Dolphin

The Western North Atlantic stock of Risso's dolphin occurs from Florida to eastern Newfoundland. They are common on the northwest Atlantic continental shelf in summer and fall with lower abundances in winter and spring. Aerial surveys in the New York Bight area sighted Risso's dolphins throughout the year at the shelf break with highest abundances in spring and summer (Normandeau Associates and APEM, 2020).

Long-Finned Pilot Whale

For pilot whales, only long-finned pilot whales are expected to occur in this project area due to their more northerly distribution and tolerance of shallower, colder shelf waters (Hayes et al., 2022). Long-finned pilot whales are found from North Carolina to Iceland, Greenland, and the Barents Sea (Waring et al., 2016). In U.S. Atlantic waters, the Western North Atlantic stock is distributed principally along the continental shelf edge off the northeastern U.S. coast in winter and early spring. In late spring, pilot whales move onto Georges Bank and into the Gulf of Maine and more northern waters and remain in these areas through late autumn (Waring et al., 2016). Additionally, aerial surveys conducted in the New York Bight noted a preference for deeper water at the shelf break throughout the year (Normandeau Associates and APEM, 2020).

Atlantic White-Sided Dolphin

White-sided dolphins are found in temperate and sub-polar waters of the North Atlantic, primarily in continental shelf waters to the 100m depth contour from central West Greenland to North Carolina (Waring et al., 2016). The Gulf of Maine stock is most common in continental shelf waters from Hudson Canyon to Georges Bank and in the Gulf of Maine and lower Bay of Fundy. Sighting data indicate seasonal shifts in distribution (Northridge et al., 1997). During January to May, low numbers of white-sided dolphins are found from Georges Bank to Jeffreys Ledge (off New Hampshire) with even lower numbers south of Georges Bank as documented by a few strandings collected on beaches of Virginia to South Carolina. From June through September, large numbers of white-sided dolphins are found from Georges Bank to the lower Bay of Fundy. From October to December, white-sided dolphins occur at intermediate densities from southern

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Georges Bank to southern Gulf of Maine (Payne and Heinemann, 1990). Sightings south of Georges Bank, particularly around Hudson Canyon, occur year round but at low densities. Aerial studies confirmed observations in fall and winter in the New York Bight area with preference for deep water at the shelf break throughout the year (Normandeau Associates and APEM, 2020).

Atlantic Spotted Dolphin

Atlantic spotted dolphins are found in tropical and warm temperate waters ranging from southern New England, south to the Gulf of Mexico and the Caribbean to Venezuela (Waring et al., 2014). The Western North Atlantic stock regularly occur in continental shelf waters south of Cape Hatteras, North Carolina and in continental shelf edge and continental slope waters north of this region (Waring et al., 2014).

Common Dolphin

Common dolphins within the U.S. Atlantic EEZ belong to the Western North Atlantic stock, generally occurring from Cape Hatteras to the Scotian Shelf (Hayes et al., 2021). Common dolphins are a highly seasonal, migratory species. Within the U.S. Atlantic EEZ, this species is distributed along the continental shelf and typically associated with Gulf Stream features (CETAP, 1982; Selzer and Payne, 1988; Hamazaki, 2002; Hayes et al., 2021). They are commonly found over the continental shelf between the 100 m and 2,000 m isobaths and over prominent underwater topography and east to the mid-Atlantic Ridge (Waring et al., 2016). Common dolphins occur from Cape Hatteras northeast to Georges Bank (35[deg] to 42[deg] N) during mid-January to May and move as far north as the Scotian Shelf from mid-summer to fall (Selzer and Payne, 1988). Migration onto the Scotian Shelf and continental shelf off Newfoundland occurs when water temperatures exceed 51.8[deg] Fahrenheit (11[deg] Celsius) (Sergeant et al., 1970; Gowans and Whitehead, 1995). Breeding usually takes place between June and September (Hayes et al., 2019). Kraus et al. (2016) observed 3,896 individual common dolphins within the Rhode Island/Massachusetts Wind Energy Area (RI-MA WEA). Summer surveys included observations of the

most individuals followed by fall, winter, then spring.

Bottlenose Dolphin

There are two distinct bottlenose dolphin morphotypes in the Western North Atlantic: Western North Atlantic Northern Migratory Coastal Stock (coastal stock) and the Western North Atlantic Offshore Stock (offshore stock) (Waring et al., 2016). The coastal stock resides in waters typically less than 20 m deep, along the inner continental shelf (within 7.5 km (4.6 miles) of shore), around islands, and is continuously distributed south of Long Island, New York into the Gulf of Mexico. Torres et al. (2003) found a statistically significant break in the distribution of the ecotypes at 34 km from shore based upon the genetic analysis of tissue samples collected in nearshore and offshore waters from New York to central Florida. The offshore stock was found exclusively seaward of 34 km and in waters deeper than 34 m.

The offshore stock is distributed primarily along the outer continental shelf and continental slope in the Northwest Atlantic Ocean from Georges Bank to the Florida Keys (Waring et al., 2017; Hayes et al., 2018). Both stocks of bottlenose dolphins are likely to occur in the proposed survey area. These two stocks are considered geographically separated by the 20 m depth contour with the Coastal Stock found in waters less than 20 m and the Offshore Stock in waters greater than 20 m.

Harbor Porpoise

In the project area, only the Gulf of Maine/Bay of Fundy stock of harbor porpoises may be present in the fall and winter. This stock is found in U.S. and Canadian Atlantic waters and is concentrated in the northern Gulf of Maine and southern Bay of Fundy region, generally in waters less than 150-m deep (Waring et al., 2016). During fall (October to December) and spring (April to June), they are more widely dispersed from New Jersey to Maine with lower densities farther north and south. In winter (January to March), intermediate densities of harbor porpoises can be found in waters off New Jersey to North Carolina with lower densities found in waters off New York to New Brunswick, Canada (Hayes et al., 2020). They are seen from the coastline to deep waters (>1,800-m; Westgate et al., 1998), although the majority of the population is found over the continental shelf (Waring et al., 2016). The main threat to the species is interactions with fisheries, with documented take in the U.S. northeast sink gillnet, mid-Atlantic gillnet, and northeast bottom trawl fisheries and in the Canadian herring weir fisheries (Waring et al., 2016).

Pinnipeds (Harbor Seal and Gray Seal)

Gray seals are regularly observed in the survey area and these seals belong to the western North Atlantic stock. The range for this stock is thought to be from New Jersey to Labrador Sea. This species inhabits temperate and sub-arctic waters and lives on remote, exposed islands, shoals, and sandbars (Jefferson et al., 2008). Current

population trends show that gray seal abundance is likely increasing in the U.S. Atlantic EEZ (Waring et al., 2016). Although the rate of increase is unknown, surveys conducted since their arrival in the 1980s indicate a steady increase in abundance in both Maine and Massachusetts (Waring et al., 2016). It is believed that recolonization by Canadian gray seals is the source of the U.S. population increase (Waring et al., 2016). Documented haulouts for gray seals exist in the Long Island area, with a possible rookery on Little Gull Island.

Since June 2022, elevated numbers of sick and dead harbor seal and gray seal have been documented along the southern and central coast of Maine. This event has also been declared an UME. Preliminary testing of samples found that some harbor and gray seals were positive for the highly pathogenic avian influenza. NMFS and other partners are working on an ongoing investigation of this UME. From June 1, 2022-February 19, 2023 there have been 337 seal strandings. Information on these UME's are available online at: https://www.fisheries.noaa.gov/2022-2023-pinniped-unusual-mortality-event-along-maine-coast.

Marine Mammal Hearing

Hearing is the most important sensory modality for marine mammals underwater, and exposure to anthropogenic sound can have deleterious effects. To appropriately assess the potential effects of exposure to sound, it is necessary to understand the frequency ranges marine mammals are able to hear. Not all marine mammal species have equal hearing capabilities (e.g., Richardson et al., 1995; Wartzok and Ketten, 1999; Au and Hastings, 2008). To reflect this, Southall et al. (2007, 2019) recommended that marine mammals be divided into hearing groups based on directly measured (behavioral or auditory evoked potential techniques) or estimated hearing ranges (behavioral response data, anatomical modeling, etc.). Note that no direct measurements of hearing ability have been successfully completed for mysticetes (i.e., low-frequency cetaceans). Subsequently, NMFS (2018) described generalized hearing ranges for these marine mammal hearing groups. Generalized hearing ranges were chosen based on the approximately 65 decibel (dB) threshold from the normalized composite audiograms, with the exception for lower limits for low-

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frequency cetaceans where the lower bound was deemed to be biologically implausible and the lower bound from Southall et al. (2007) retained. Marine mammal hearing groups and their associated hearing ranges are provided in Table 3.

Table 3--Marine Mammal Hearing Groups [NMFS, 2018]

Hearing group

Generalized hearing range *

Low-frequency (LF) cetaceans (baleen 7 Hz to 35 kHz.

whales).

Mid-frequency (MF) cetaceans (dolphins, 150 Hz to 160 kHz.

toothed whales, beaked whales, bottlenose whales).
High-frequency (HF) cetaceans (true 275 Hz to 160 kHz. porpoises, Kogia, river dolphins, Cephalorhynchid, Lagenorhynchus cruciger & L. australis).
Phocid pinnipeds (PW) (underwater) (true 50 Hz to 86 kHz. seals).
Otariid pinnipeds (OW) (underwater) (sea 60 Hz to 39 kHz. lions and fur seals).

* Represents the generalized hearing range for the entire group as a composite (i.e., all species within the group), where individual species' hearing ranges are typically not as broad. Generalized hearing range chosen based on ~65 dB threshold from normalized composite audiogram, with the exception for lower limits for LF cetaceans (Southall et al., 2007) and PW pinniped (approximation).

The pinniped functional hearing group was modified from Southall et al. (2007) on the basis of data indicating that phocid species have consistently demonstrated an extended frequency range of hearing compared to otariids, especially in the higher frequency range (Hemil[auml] et al., 2006; Kastelein et al., 2009; Reichmuth and Holt, 2013).

For more detail concerning these groups and associated frequency ranges, please see NMFS (2018) for a review of available information.

Potential Effects of Specified Activities on Marine Mammals and Their Habitat

This section provides a discussion of the ways in which components of the specified activity may impact marine mammals and their habitat. Detailed descriptions of the potential effects of similar specified activities have been provided in other recent Federal Register notices, including for survey activities using the same methodology, over a similar amount of time, and occurring in the mid-Atlantic region, including the New York Bight (e.g., 87 FR 24103, April 22, 2022; 87 FR 50293, August 16, 2022; 87 FR 51359, August 22, 2022). No significant new information is available, and we reference the detailed discussions in those documents rather than repeating the details here.

The Estimated Take section later in this document includes a quantitative analysis of the number of individuals that are expected to be taken by this activity. The Negligible Impact Analysis and Determination section considers the content of this section, the Estimated Take section, and the Proposed Mitigation section, to draw conclusions regarding the likely impacts of these activities on the reproductive success or survivorship of individuals and whether those impacts are reasonably expected to, or reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival.

Summary on Specific Potential Effects of Acoustic Sound Sources

For general information on sound, its interaction with the marine environment, and a description of acoustic terminology, please see ANSI (1986, 1995), Au and Hastings (2008), Hastings and Popper (2005), Mitson (1995), NIOSH (1998), Richardson et al. (1995), Southall et al. (2007), and Urick (1983). Underwater sound from active acoustic sources can cause one or more of the following: temporary or permanent hearing impairment, behavioral disturbance, masking, stress, and non-auditory physical effects. The degree of effect is intrinsically related to the signal characteristics, received level, distance from the source, and duration of the sound exposure. Marine mammals exposed to highintensity sound, or to lower-intensity sound for prolonged periods, can experience hearing threshold shift (TS), which is the loss of hearing sensitivity at certain frequency ranges (Finneran, 2015). TS can be permanent (PTS; permanent threshold shift), in which case the loss of hearing sensitivity is not fully recoverable, or temporary (TTS; temporary threshold shift), in which case the animal's hearing threshold would recover over time (Southall et al., 2007).

When PTS occurs, there is physical damage to the sound receptors in the ear (i.e., tissue damage), whereas TTS represents primarily tissue fatigue and is reversible (Southall et al., 2007). In addition, other investigators have suggested that TTS is within the normal bounds of physiological variability and tolerance and does not represent physical injury (e.g., Ward, 1997). Therefore, NMFS does not consider TTS to constitute auditory injury.

Animals in the vicinity of AE's proposed HRG survey activities are unlikely to incur even TTS due to the characteristics of the sound sources, which include generally very short pulses and potential duration of exposure. These characteristics mean that instantaneous exposure is unlikely to cause TTS because it is unlikely that exposure would occur close enough to the vessel for received levels to exceed peak pressure TTS criteria, and the cumulative duration of exposure would be insufficient to exceed cumulative sound exposure level (SEL) criteria. Even for high-frequency cetacean species (e.g., harbor porpoises), which have the greatest sensitivity to potential TTS, individuals would have to make a very close approach and remain very close to the vessel operating these sources in order to receive multiple exposures at relatively high levels as would be necessary to cause TTS. Intermittent exposures--as would occur due to the brief, transient signals produced by these sources--require a higher cumulative SEL to induce TTS than would continuous exposures of the same duration (i.e., intermittent exposure results in lower levels of TTS). Moreover, most marine mammals would more likely avoid a loud sound source rather than swim in such close proximity as to result in TTS. Kremser et al. (2005) noted that the probability of a cetacean swimming through the area of exposure when a sub-bottom profiler emits a pulse is small--because if the animal was in the area, it would have to pass the transducer at close range in order to be subjected to sound levels that could cause TTS and would likely exhibit avoidance behavior to the area near the transducer rather than swim through at such a close range.

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Behavioral disturbance to marine mammals from sound may include a variety of effects, including subtle changes in behavior (e.g., minor or brief avoidance of an area or changes in vocalizations), more conspicuous changes in similar behavioral activities, and more sustained and/or potentially severe reactions, such as displacement from or abandonment of high-quality habitat. Behavioral responses to sound are highly variable and context-specific and any reactions depend on numerous intrinsic and extrinsic factors (e.g., species, state of maturity, experience, current activity, reproductive state, auditory sensitivity, time of day), as well as the interplay between factors. Available studies show wide variation in response to underwater sound; therefore, it is difficult to predict specifically how any given sound in a particular instance might affect marine mammals perceiving the signal.

In addition, sound can disrupt behavior through masking, or interfering with, an animal's ability to detect, recognize, or discriminate between acoustic signals of interest (e.g., those used for intraspecific communication and social interactions, prey detection, predator avoidance, navigation). Masking occurs when the receipt of a sound is interfered with by another coincident sound at similar frequencies and at similar or higher intensity, and may occur whether the sound is natural (e.g., snapping shrimp, wind, waves, precipitation) or anthropogenic (e.g., shipping, sonar, seismic exploration) in origin. Marine mammal communications would not likely be masked appreciably by the acoustic signals given the directionality of the signals for the HRG survey equipment planned for use (Table 1-2 of AE's IHA application) and the brief period for when an individual mammal would likely be exposed.

Sound may affect marine mammals through impacts on the abundance, behavior, or distribution of prey species (e.g., crustaceans, cephalopods, fish, and zooplankton) (i.e., effects to marine mammal habitat). Prey species exposed to sound might move away from the sound source, experience TTS, experience masking of biologically relevant sounds, or show no obvious direct effects. The most likely impacts (if any) for most prey species in a given area would be temporary avoidance of the area. Surveys using active acoustic sound sources move through an area, limiting exposure to multiple pulses. In all cases, sound levels would return to ambient once a survey ends and the noise source is shut down and, when exposure to sound ends, behavioral and/or physiological responses are expected to end relatively quickly. Finally, the HRG survey equipment will not have significant impacts to the seafloor and does not represent a source of pollution.

Vessel Strike

Vessel collisions with marine mammals, or ship strikes, can result in death or serious injury of the animal. These interactions are typically associated with large whales, which are less maneuverable than are smaller cetaceans or pinnipeds in relation to large vessels. Ship strikes generally involve commercial shipping vessels, which are

normally larger and of which there is much more traffic in the ocean than geophysical survey vessels. Jensen and Silber (2004) summarized ship strikes of large whales worldwide from 1975-2003 and found that most collisions occurred in the open ocean and involved large vessels (e.g., commercial shipping). For vessels used in geophysical survey activities, vessel speed while towing gear is typically only 4-5 knots (2.1-2.6 m/s). At these speeds, both the possibility of striking a marine mammal and the possibility of a strike resulting in serious injury or mortality are so low as to be discountable. At average transit speed for geophysical survey vessels, the probability of serious injury or mortality resulting from a strike is less than 50 percent. However, the likelihood of a strike actually happening is again low given the smaller size of these vessels and generally slower speeds. Notably in the Jensen and Silber study, no strike incidents were reported for geophysical survey vessels during that time period.

The potential effects of AE's specified survey activity are expected to be limited to Level B behavioral harassment. No permanent or temporary auditory effects or significant impacts to marine mammal habitat, including prey, are expected.

Estimated Take

This section provides an estimate of the number of incidental takes proposed for authorization through this IHA, which will inform both NMFS' consideration of ``small numbers,'' and the negligible impact determinations.

Harassment is the only type of take expected to result from these activities. Except with respect to certain activities not pertinent here, section 3(18) of the MMPA defines `harassment' as any act of pursuit, torment, or annoyance, which (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment).

Authorized takes would be by Level B harassment only, in the form of disruption of behavioral patterns for individual marine mammals resulting from exposure to sound produced by the sparker or boomer. Based on the characteristics of the signals produced by the acoustic sources planned for use, Level A harassment is neither anticipated (even absent mitigation), nor proposed to be authorized. As described previously, no serious injury or mortality is anticipated or proposed to be authorized for this activity. Below we describe how the proposed take numbers are estimated.

For acoustic impacts, generally speaking, we estimate take by considering: (1) acoustic thresholds above which NMFS believes the best available science indicates marine mammals will be behaviorally harassed or incur some degree of permanent hearing impairment; (2) the area or volume of water that will be ensonified above these levels in a day; (3) the density or occurrence of marine mammals within these ensonified areas; and, (4) the number of days of activities. We note that while these factors can contribute to a basic calculation to

provide an initial prediction of potential takes, additional information that can qualitatively inform take estimates is also sometimes available (e.g., previous monitoring results or average group size). Below, we describe the factors considered here in more detail and present the proposed take estimates.

Acoustic Thresholds

NMFS recommends the use of acoustic thresholds that identify the received level of underwater sound above which exposed marine mammals would be reasonably expected to be behaviorally harassed (equated to Level B harassment) or to incur PTS of some degree (equated to Level A harassment).

Level B Harassment--Though significantly driven by received level, the onset of behavioral disturbance from anthropogenic noise exposure is also informed to varying degrees by other factors related to the source or exposure context (e.g., frequency, predictability, duty cycle, duration of the exposure, signal-to-noise ratio, distance to the source), the environment (e.g., bathymetry, other noises in the area, predators in the area), and the receiving animals (hearing, motivation, experience, demography, life stage, depth) and can be difficult to predict

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(e.g., Southall et al., 2007, 2021; Ellison et al., 2012). Based on what the available science indicates and the practical need to use a threshold based on a metric that is both predictable and measurable for most activities, NMFS typically uses a generalized acoustic threshold based on received level to estimate the onset of behavioral harassment. NMFS generally predicts that marine mammals are likely to be behaviorally harassed in a manner considered to be Level B harassment when exposed to underwater anthropogenic noise above root-mean-squared pressure received levels (RMS SPL) of 120 dB (referenced to 1 micropascal (re 1 [mu]Pa)) for continuous (e.g., vibratory pile-driving, drilling) and above RMS SPL 160 dB re 1 [mu]Pa for non-explosive impulsive (e.g., seismic airguns) or intermittent (e.g., scientific sonar) sources.

Generally speaking, Level B harassment take estimates based on these behavioral harassment thresholds are expected to include any likely takes by TTS as, in most cases, the likelihood of TTS occurs at distances from the source less than those at which behavioral harassment is likely. TTS of a sufficient degree can manifest as behavioral harassment, as reduced hearing sensitivity and the potential reduced opportunities to detect important signals (conspecific communication, predators, prey) may result in changes in behavior patterns that would not otherwise occur. AE's proposed activities include the use of impulsive (i.e., boomer and sparker) sources, and therefore, the RMS SPL thresholds of 160 dB re 1 [mu]Pa is applicable.

Level A harassment--NMFS' Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0) (Technical Guidance, 2018) identifies dual criteria to assess auditory

injury (Level A harassment) to five different marine mammal groups (based on hearing sensitivity) as a result of exposure to noise from two different types of sources (impulsive or non-impulsive).

The references, analysis, and methodology used in the development of the thresholds are described in NMFS' 2018 Technical Guidance, which may be accessed at: www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-acoustic-technical-guidance.

AE's proposed activity includes the use of impulsive (i.e., boomer and sparker) sources. However, as discussed above, NMFS has concluded that Level A harassment is not a reasonably likely outcome for marine mammals exposed to noise through use of the sources proposed for use here, and the potential for Level A harassment is not evaluated further in this document. Please see AE's application for details of a quantitative exposure analysis exercise, i.e., calculated Level A harassment isopleths and estimated potential Level A harassment exposures. AE did not request authorization of take by Level A harassment, and no take by Level A harassment is proposed for authorization by NMFS.

Ensonified Area

Here, we describe operational and environmental parameters of the activity that are used in estimating the area ensonified above the acoustic thresholds, including source levels and transmission loss coefficient.

NMFS has developed a user-friendly methodology for estimating the extent of the Level B harassment isopleths associated with relevant HRG survey equipment (NMFS 2020). This methodology incorporates frequency and directionality (when relevant) to refine estimated ensonified zones. For acoustic sources that operate with different beamwidths, the maximum beamwidth was used, and the lowest frequency of the source was used when calculating the frequency-dependent absorption coefficient (Table 1). AE used 180-degree beamwidth in the calculation for the proposed sparker as is appropriate for an omnidirectional source.

NMFS considers the data provided by Crocker and Fratantonio (2016) to represent the best available information on source levels associated with HRG survey equipment and, therefore, recommends that source levels provided by Crocker and Fratantonio (2016) be incorporated in the method described above to estimate isopleth distances to harassment thresholds. In cases where the source level for a specific type of HRG equipment is not provided in Crocker and Fratantonio (2016), NMFS recommends either the source levels provided by the manufacturer be used, or, in instances where source levels provided by the manufacturer are unavailable or unreliable, a proxy from Crocker and Fratantonio (2016) be used instead. Table 1 shows the HRG equipment type used during the planned surveys and the source levels associated with those HRG equipment types.

AE proposed to use the Dual Geo-Spark 2000X (400 tip/800 J). For all source configurations (Table 1), the maximum power expected to be discharged from the sparker source is 800 J. However, Crocker and Fratantonio (2016) did not measure the Dual Geo-Spark or a source with an energy of 800 J. A similar alternative system, the Applied Acoustics Dura-spark with a 400 tip, was measured by Crocker and Fratantonio

(2016) with an input voltage of 500-2,000 J, and these measurements were used as a proxy for the Dual Geo-Spark. Table 1 shows the source parameters associated with this proxy. Using the measured source level of 203 dB RMS of the proxy, results of modeling indicated that the sparker would produce an estimated distance of 141 m to the Level B harassment isopleth.

AE additionally proposed to use the Geo-Boomer 300-500. Crocker and Fratantonio (2016) did not measure the Geo-Boomer 300-500. A similar alternative system, Applied Acoustics S-Boom, was measured by Crocker and Fratantonio (2016) and the 500 J values were used as a proxy for the Geo-Boomer 300-500. Using the measured source level of 202 dB RMS of the proxy, results of modeling indicated that the boomer would produce an estimated distance of 51 m to the Level B harassment isopleth.

Results of modeling using the methodology described above indicated that, of the HRG survey equipment proposed for use by the applicant that has the potential to result in Level B harassment of marine mammals, the Dual Geo-Spark 2000X would produce the largest distance to the Level B harassment isopleth (141 m).

Marine Mammal Occurrence

In this section, we provide information about the occurrence of marine mammals, including density or other relevant information, which will inform the take calculations.

Habitat-based density models produced by the Duke University Marine Geospatial Ecology Laboratory (Roberts et al., 2016; Roberts et al., 2022) represent the best available information regarding marine mammal densities in the proposed survey area. These density data incorporate aerial and shipboard line-transect survey data from NMFS and other organizations and incorporate data from numerous physiographic and dynamic oceanographic and biological covariates, and controls for the influence of sea state, group size, availability bias, and perception bias on the probability of making a sighting. These density models were originally developed for all cetacean taxa in the U.S. Atlantic (Roberts et al., 2016). Most recently, in 2022, models for all taxa were updated. More information is available online at

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https://seamap.env.duke.edu/models/Duke/EC/. Marine mammal density estimates in the survey area (animals/km\2\) were obtained using the most recent model results for all taxa.

For the exposure analysis, density data from Roberts et al. (2022) were mapped using a geographic information system (GIS). For the survey area, the monthly densities of each species as reported by Roberts et al. (2022) were averaged by season; thus, a density was calculated for each species for spring, summer, fall, and winter. Density seasonal averages were calculated for both the Lease Area and the ECR Area for each species to assess the greatest average seasonal densities for each species. To be conservative since the exact timing for the survey during the year is uncertain, the greatest average seasonal density

calculated for each species was carried forward in the exposure analysis, with exceptions noted later in this discussion. Estimated greatest average seasonal densities (animals/km\2\) of marine mammal species that may be taken incidental to the planned survey can be found in Tables 6-1 and 6-2 of AE's IHA application. Below, we discuss how densities were assumed to apply to specific species for which the Roberts et al. (2022) models provide results at the genus or guild level.

There are two stocks of bottlenose dolphins that may be impacted by the surveys (Western North Atlantic Northern Migratory Coastal Stock (coastal stock) and the Western North Atlantic Offshore Stock (offshore stock)). However, Roberts et al. (2022) do not differentiate by stock. The Coastal Stock is assumed to generally occur in waters less than 20 m and the Offshore Stock in waters deeper than 20 m (65-ft) isobath.

The lease area is in waters deeper than 20 m and only the Offshore Stock would occur and could be potentially taken by survey effort in that area. For the ECR survey area, both stocks could occur in the area, so AE calculated separate mean seasonal densities for the portion to be surveyed that is less than 20 m in depth and for the portion that is greater than 20 m in depth to use for estimating take of the Coastal and Offshore Stocks of bottlenose dolphins, respectively. The total tracklines in waters deeper than 20 m, between the ECR and the lease area, are 20,305 km. The total tracklines in waters less than 20 m depth, only found in portions of the ECR, are 1,440 km. Therefore, different trackline totals were used to calculate take of the Coastal and Offshore Stocks of bottlenose dolphins (20,305 km trackline of Offshore Stock and 1,440 km trackline of the Coastal Stock). All other species analyzed used the total 21,745 km of trackline for calculations.

Furthermore, the Roberts et al. (2022) density model does not differentiate between the different pinniped species. For seals, given their size and behavior when in the water, seasonality, and feeding preferences, there is limited information available on species-specific distribution. Density estimates of Roberts et al. (2022) include all seal species that may occur in the Western North Atlantic combined (i.e., harbor, gray, hooded, and harp). For this IHA, only the harbor seals and gray seals are reasonably expected to occur in the survey area; densities of seals were split evenly between these two species.

Lastly, the Roberts et al. (2022) density model does not differentiate between the pilot whale species. While the exact latitudinal ranges of the two species are uncertain, only long-finned pilot whales are expected to occur in this project area due to their more northerly distribution and tolerance of shallower, colder shelf waters (Hayes et al., 2022).

Take Estimation

Here we describe how the information provided above is synthesized to produce a quantitative estimate of the take that is reasonably likely to occur and proposed for authorization.

In order to estimate the number of marine mammals predicted to be exposed to sound levels that would result in harassment, radial

distances to predicted isopleths corresponding to Level B harassment thresholds are calculated, as described above. The maximum distance (i.e., 141-m distance associated with the Dual Geo-Spark 2000X) to the Level B harassment criterion and the total length of the survey trackline are then used to calculate the total ensonified area, or zone of influence (ZOI) around the survey vessel.

AE proposes to conduct the survey, using either the boomer or sparker, for a total of 21,745 km of trackline, of which 14,025 km are in the Lease area and 7,720 km in the ECR area. Of the ECR survey trackline, 1,440 km are in waters less than 20 m depth. AE is requesting take based on the worst-case-scenario between the equipment proposed, which is the use of only the Dual Geo-Spark 2000X--based on the largest estimated distance to the harassment criterion. Based on the maximum estimated distance to the Level B harassment threshold of 141-m (sparker) and the total survey length, the total ensonified area is 6,133 km\2\. That is approximately 3,955 km\2\ for the lease area and 2,177 km\2\ in the ECR area with 407 km\2\ in waters less than 20 m depth based on the following formula:

Mobile Source ZOI = (Total survey length x 2r) + pr2

Where total survey length is equal to the total distance of the survey track lines within the lease area; and r is equal to the maximum radial distance from a given sound source to the Level B harassment threshold.

This is a conservative estimate as it assumes the HRG source that results in the greatest isopleth distance to the Level B harassment threshold would be operated at all times during the entire survey, which may not ultimately occur and assumes the worst case scenario is the scenario chosen for the surveys. The number of marine mammals expected to be incidentally taken during the total survey is then calculated by estimating the number of each species predicted to occur within the ensonified area (animals/km\2\), incorporating the greatest seasonal estimated marine mammal densities as described above. The product is then rounded, to generate an estimate of the total number of instances of harassment expected for each species over the duration of the survey. A summary of this method is illustrated in the following formula with the resulting take of marine mammals shown below in Table 4:

Estimated Take = $D \times ZOI$

Where:

D is the greatest average seasonal species density (per km\2\); and ZOI is the maximum daily ensonified area to relevant thresholds.

Table 4--Estimated Take Numbers and Total Take Proposed for Authorization

Density Proposed total

Species Ensonified (animals/ Estimated take take Percent of

	area (km\2\)	km\2\)		authorization	abundance \c\
North Atlantic right whale	6,133	0.001932	12	12	3.51
Humpback whale	6,133	0.003853	24	24	1.69
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Fin whale	6,133	0.006256	38	38	0.56
Sei whale	6,133	0.001972	12	12	0.19
Minke whale	6,133	0.029226	179	179	0.82
Sperm whale	6,133	0.000447	3	3	0.06
Risso's dolphin	6,133	0.003695	23	23	0.06
Long-finned pilot whale	6,133	0.003363	21	21	0.05
Atlantic white-sided dolphin	6,133	0.033740	207	207	0.22
Common dolphin	6,133	0.335271	2,056	2,056	1.19
Atlantic spotted dolphin	6,133	0.014496	89	89	0.22
Bottlenose dolphin (W.N.	5,727	0.304831	1,746	1,746	2.78
Atlantic Offshore) \a\	ŕ		•		
Bottlenose dolphin (Northern	407	0.956430	389	389	5.86
Migratory Coastal) \b\					
Harbor porpoise	6,133	0.178544	1,095	1,095	1.15
Harbor seal	6,133	\d\ 0.260186	1,596	1,596	2.60
Gray seal	6,133	\d\ 0.260186	1,596	1,596	\e\ 0.35

\a\ The ensonified area for the offshore stock is for >=20 m water depth includes all the lease area and portions of the ECR.

- \c\ Based on the 2022 draft marine mammal stock assessment reports (SAR).
- \d\ These each represent 50% of a generic seal density value.
- \e\ This abundance estimate is based on the total stock abundance (including animals in Canada). The NMFS stock abundance estimate for US population is only 27,300.

Proposed Mitigation

In order to issue an IHA under section 101(a)(5)(D) of the MMPA, NMFS must set forth the permissible methods of taking pursuant to the activity, and other means of effecting the least practicable impact on the species or stock and its habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance, and on the availability of the species or stock for taking for certain subsistence uses (latter not applicable for this action). NMFS regulations require applicants for incidental take authorizations to include information about the availability and feasibility (economic and technological) of equipment, methods, and manner of conducting the activity or other means of effecting the least practicable adverse impact upon the affected species or stocks, and their habitat (50 CFR 216.104(a)(11)).

In evaluating how mitigation may or may not be appropriate to ensure the least practicable adverse impact on species or stocks and their habitat, NMFS considers two primary factors:

[\]b\ The ensonified area for the migratory coastal stock is only the areas of <20 m water depth (found only in portions of the ECR).

- (1) The manner in which, and the degree to which, the successful implementation of the measure(s) is expected to reduce impacts to marine mammals, marine mammal species or stocks, and their habitat. This considers the nature of the potential adverse impact being mitigated (likelihood, scope, range). It further considers the likelihood that the measure will be effective if implemented (probability of accomplishing the mitigating result if implemented as planned), the likelihood of effective implementation (probability implemented as planned), and;
- (2) The practicability of the measures for applicant implementation, which may consider such things as cost, and impact on operations.

NMFS proposes that the following mitigation measures be implemented during AE's planned marine site characterization surveys. Pursuant to section 7 of the ESA, AE would also be required to adhere to relevant Project Design Criteria (PDC) of the NMFS' Greater Atlantic Regional Fisheries Office (GARFO) programmatic consultation (specifically PDCs 4, 5, and 7) regarding geophysical surveys along the U.S. Atlantic coast (https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-take-reporting-programmatics-greater-atlantic#offshore-wind-site-assessment-and-site-characterization-activities-programmatic-consultation).

Visual Monitoring and Shutdown Zones

AE must employ independent, dedicated, trained PSOs, meaning that the PSOs must (1) be employed by a third-party observer provider, (2) have no tasks other than to conduct observational effort, collect data, and communicate with and instruct relevant vessel crew with regard to the presence of marine mammals and mitigation requirements (including brief alerts regarding maritime hazards), and (3) have successfully completed an approved PSO training course appropriate for geophysical surveys. Visual monitoring must be performed by qualified, NMFS-approved PSOs. PSO resumes must be provided to NMFS for review and approval prior to the start of survey activities.

During survey operations (e.g., any day on which use of the sparker or boomer sources is planned to occur, and whenever the sparker or boomer source is in the water, whether activated or not), a minimum of one visual marine mammal observer (PSO) must be on duty on each source vessel and conducting visual observations at all times during daylight hours (i.e., from 30 minutes prior to sunrise through 30 minutes following sunset). A minimum of two PSOs must be on duty on each source vessel during nighttime hours. Visual monitoring must begin no less than 30 minutes prior to ramp-up (described below) and must continue until one hour after use of the sparker or boomer source ceases.

Visual PSOs shall coordinate to ensure 360[deg] visual coverage around the vessel from the most appropriate observation posts and shall conduct visual observations using binoculars and the naked eye while free from distractions and in a consistent, systematic, and diligent manner. PSOs shall establish and monitor applicable shutdown zones (see below). These zones shall be based upon the radial distance from the sparker or boomer source (rather than being based around the vessel itself).

Four shutdown zones are defined, depending on the species and

context. An extended shutdown zone encompassing the area at and below the sea surface out to a radius of 500 m from the sparker or boomer source (0-500 m) is defined for NARW. For all other marine mammals, the shutdown zone

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encompasses a standard distance of 100 m (0-100 m) during the use of the sparker. For ESA-listed marine mammals during the use of the boomer, the shutdown zone is 100 m (0-100 m). For all non-ESA-listed marine mammals, the shutdown zone during the use of the boomer is 50 m (0-50 m). Any observations of marine mammals by crew members aboard any vessel associated with the survey shall be relayed to the PSO team.

Visual PSOs may be on watch for a maximum of 4 consecutive hours followed by a break of at least 1 hour between watches and may conduct a maximum of 12 hours of observation per 24-hour period.

Pre-Start Clearance and Ramp-Up Procedures

A ramp-up procedure, involving a gradual increase in source level output, is required at all times as part of the activation of the sparker and boomer sources when technically feasible. Operators should ramp up sparker and boomer to half power for 5 minutes and then proceed to full power. A 30-minute pre-start clearance observation period of the shutdown zones must occur prior to the start of ramp-up. The intent of the pre-start clearance observation period (30 minutes) is to ensure no marine mammals are within the shutdown zones prior to the beginning of ramp-up. The intent of the ramp-up is to warn marine mammals of pending operations and to allow sufficient time for those animals to leave the immediate vicinity. All operators must adhere to the following pre-start clearance and ramp-up requirements:

The operator must notify a designated PSO of the planned start of ramp-up as agreed upon with the lead PSO; the notification time should not be less than 60 minutes prior to the planned ramp-up in order to allow the PSOs time to monitor the shutdown zones for 30 minutes prior to the initiation of ramp-up (pre-start clearance). During this 30 minute pre-start clearance period the entire shutdown zone must be visible, except as indicated below.

Ramp-ups shall be scheduled so as to minimize the time spent with the source activated. $\label{eq:continuous} % \begin{subarray}{ll} \end{subarray} % \begin{subarray}{ll} \end{subar$

A visual PSO conducting pre-start clearance observations must be notified again immediately prior to initiating ramp-up procedures and the operator must receive confirmation from the PSO to proceed.

Any PSO on duty has the authority to delay the start of survey operations if a marine mammal is detected within the applicable pre-start clearance zone.

The operator must establish and maintain clear lines of communication directly between PSOs on duty and crew controlling the acoustic source to ensure that mitigation commands are conveyed swiftly while allowing PSOs to maintain watch.

The pre-start clearance requirement is waived for small delphinids

and pinnipeds. Detection of a small delphinid (individual belonging to the following genera of the Family Delphinidae: Steno, Delphinus, Lagenorhynchus, Stenella, and Tursiops) or pinniped within the shutdown zone does not preclude beginning of ramp-up, unless the PSO confirms the individual to be of a genus other than those listed, in which case normal pre-clearance requirements apply.

If there is uncertainty regarding identification of a marine mammal species (i.e., whether the observed marine mammal(s) belongs to one of the delphinid genera for which the pre-clearance requirement is waived), PSOs may use best professional judgment in making the decision to call for a shutdown.

Ramp-up may not be initiated if any marine mammal to which the pre-start clearance requirement applies is within the shutdown zone. If a marine mammal is observed within the shutdown zone during the 30-minute pre-start clearance period, ramp-up may not begin until the animal(s) has been observed exiting the zones or until an additional time period has elapsed with no further sightings (30 minutes for all baleen whale species and sperm whales and 15 minutes for all other species).

PSOs must monitor the shutdown zones 30 minutes before and during ramp-up, and ramp-up must cease and the source must be shut down upon observation of a marine mammal within the applicable shutdown zone.

Ramp-up may occur at times of poor visibility, including nighttime, if appropriate visual monitoring has occurred with no detections of marine mammals in the 30 minutes prior to beginning ramp-up. Sparker or boomer activation may only occur at night where operational planning cannot reasonably avoid such circumstances.

If the acoustic source is shut down for brief periods (i.e., less than 30 minutes) for reasons other than implementation of prescribed mitigation (e.g., mechanical difficulty), it may be activated again without ramp-up if PSOs have maintained constant visual observation and no detections of marine mammals have occurred within the applicable shutdown zone. For any longer shutdown, pre-start clearance observation and ramp-up are required.

Shutdown Procedures

All operators must adhere to the following shutdown requirements: Any PSO on duty has the authority to call for shutdown of the sparker or boomer source if a marine mammal is detected within the applicable shutdown zone.

The operator must establish and maintain clear lines of communication directly between PSOs on duty and crew controlling the source to ensure that shutdown commands are conveyed swiftly while allowing PSOs to maintain watch.

When the sparker or boomer source is active and a marine mammal appears within or enters the applicable shutdown zone, the source must be shut down. When shutdown is instructed by a PSO, the sparker or boomer source must be immediately deactivated and any dispute resolved only following deactivation.

Four shutdown zones are defined, depending on the species

and context. An extended shutdown zone encompassing the area at and below the sea surface out to a radius of 500 m from the sparker or boomer source (0-500 m) is defined for NARW. For all other marine mammals, the shutdown zone encompasses a standard distance of 100 m (0-100 m) during the use of the sparker. For ESA-listed marine mammals during the use of the boomer, the shutdown zone is 100 m (0-100 m). For all non-ESA-listed marine mammals, the shutdown zone during use of the boomer is 50 m (0-50 m).

The shutdown requirement is waived for small delphinids and pinnipeds. If a small delphinid (individual belonging to the following genera of the Family Delphinidae: Steno, Delphinus, Lagenorhynchus, Stenella, and Tursiops) or pinniped is visually detected within the shutdown zone, no shutdown is required unless the PSO confirms the individual to be of a genus other than those listed, in which case a shutdown is required.

If there is uncertainty regarding identification of a marine mammal species (i.e., whether the observed marine mammal(s) belongs to one of the delphinid genera for which shutdown is waived or one of the species with a larger shutdown zone), PSOs may use best professional judgment in making the decision to call for a shutdown.

Upon implementation of shutdown, the source may be reactivated after the marine mammal has been observed exiting the applicable shutdown zone or following a clearance period (30

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minutes for all baleen whale species and sperm whales and 15 minutes for all other species) with no further detection of the marine mammal. If a species for which authorization has not been granted, or a species for which authorization has been granted but the authorized number of takes have been met, approaches or is observed within the Level B harassment zone (141 m sparkers, 51 m boomers), shutdown must occur.

Vessel Strike Avoidance

Crew and supply vessel personnel must have access to and use an appropriate reference guide that includes identifying information on all marine mammals that may be encountered. Vessel operators must comply with the below measures except under extraordinary circumstances when the safety of the vessel or crew is in doubt or the safety of life at sea is in question. These requirements do not apply in any case where compliance would create an imminent and serious threat to a person or vessel or to the extent that a vessel is restricted in its ability to maneuver and, because of the restriction, cannot comply.

Vessel operators and crews must maintain a vigilant watch for all marine mammals and slow down, stop their vessel(s), or alter course, as appropriate and regardless of vessel size, to avoid striking any marine mammals. A single marine mammal at the surface may indicate the presence of submerged animals in the vicinity of the vessel; therefore, precautionary measures should always be exercised. A visual observer aboard the vessel must monitor a vessel strike avoidance zone around the vessel (species-specific distances are detailed below). Visual

observers monitoring the vessel strike avoidance zone may be third-party observers (i.e., PSOs) or crew members, but crew members responsible for these duties must be provided sufficient training to (1) distinguish marine mammal from other phenomena and (2) broadly to identify a marine mammal as a NARW, other whale (defined in this context as sperm whales or baleen whales other than NARWs), or other marine mammals.

All survey vessels, regardless of size, must observe a 10-knot (18.52 km/h) speed restriction in specific areas designated by NMFS for the protection of NARWs from vessel strikes. These include all Seasonal Management Areas (SMA) established under 50 CFR 224.105 (when in effect), any dynamic management areas (DMA) (when in effect), and Slow Zones. See www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-ship-strikes-north-atlantic-right-whales for specific detail regarding these areas.

All vessels must reduce speed to 10 knots (18.52 km/h) or less when mother/calf pairs, pods, or large assemblages of cetaceans are observed near a vessel.

All vessels must maintain a minimum separation distance of 500 m from NARWs, baleen whales (except humpback and minke), sperm whales, and any unidentified large whales. If a NARW, baleen whale (except humpback and minke), or an unidentified large whale is sighted within the relevant separation distance, the vessel must steer a course away at 10 kn (18.52 km/h) or less until the 500-m separation distance has been established. If a whale is observed but cannot be confirmed as a species other than a NARW, the vessel operator must assume that it is a NARW and take appropriate action.

All vessels must maintain a minimum separation distance of 100 m from all humpback and mike whales.

All vessels must, to the maximum extent practicable, attempt to maintain a minimum separation distance of 50 m from all other marine mammals, with an understanding that at times this may not be possible (e.g., for animals that approach the vessel).

When marine mammals are sighted while a vessel is underway, the vessel must take action as necessary to avoid violating the relevant separation distance (e.g., attempt to remain parallel to the animal's course, avoid excessive speed or abrupt changes in direction until the animal has left the area, reduce speed and shift the engine to neutral). This does not apply to any vessel towing gear or any vessel that is navigationally constrained.

Members of the PSO team will consult NMFS NARW reporting system and Whale Alert, daily and as able, for the presence of NARWs throughout survey operations, and for the establishment of DMAs and/or Slow Zones. It is AE's responsibility to maintain awareness of the establishment and location of any such areas and to abide by these requirements accordingly.

Seasonal Operating Requirements

As described above, a section of the survey area partially overlaps with a portion of a NARW SMA off the port of New York/New Jersey. This SMA is active from November 1 through April 30 of each year. The survey vessel, regardless of length, would be required to adhere to vessel

speed restrictions (<10 knots (18.52 km/h)) when operating within the SMA during times when the SMA is active.

Table 5--North Atlantic Right Whale Dynamic Management Area (DMA) and Seasonal Management Area (SMA)
Restrictions Within the Survey Areas

н			-		
	Survey area	Species	DMA restrictions	Slow zones	SMA restrictions
	Lease Area ECR (within SMA) ECR (outside SMA)	right whale	If established by NMF vessel will abide by restrictions.	•	N/A. November 1 through April 31 (Ports of New York/New Jersey). N/A.

More information on Ship Strike Reduction for the NARW can be found at NMFS' website: https://www.fisheries.noaa.gov/national/endangered-species-conservation/reducing-vessel-strikes-north-atlantic-right-whales whales.

Based on our evaluation of the applicant's proposed measures, as well as other measures considered by NMFS, NMFS has preliminarily determined that the proposed mitigation measures provide the means of effecting the least practicable impact on the affected species or stocks and their habitat, paying particular attention to rookeries, mating grounds, and areas of similar significance.

Proposed Monitoring and Reporting

In order to issue an IHA for an activity, section 101(a)(5)(D) of the MMPA states that NMFS must set forth requirements pertaining to the monitoring and reporting of such taking. The MMPA implementing regulations at 50 CFR 216.104(a)(13) indicate that requests for authorizations must include the suggested means of accomplishing the necessary monitoring and reporting that will result in increased knowledge

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of the species and of the level of taking or impacts on populations of marine mammals that are expected to be present while conducting the activities. Effective reporting is critical both to compliance as well as ensuring that the most value is obtained from the required monitoring.

Monitoring and reporting requirements prescribed by NMFS should contribute to improved understanding of one or more of the following:

Occurrence of marine mammal species or stocks in the area in which take is anticipated (e.g., presence, abundance, distribution, density);

Nature, scope, or context of likely marine mammal exposure to potential stressors/impacts (individual or cumulative, acute or chronic), through better understanding of: (1) action or environment (e.g., source characterization, propagation, ambient noise); (2) affected species (e.g., life history, dive patterns); (3) co-occurrence

of marine mammal species with the activity; or (4) biological or behavioral context of exposure (e.g., age, calving or feeding areas); Individual marine mammal responses (behavioral or physiological) to acoustic stressors (acute, chronic, or cumulative), other stressors, or cumulative impacts from multiple stressors; How anticipated responses to stressors impact either: (1) long-term fitness and survival of individual marine mammals; or (2)

Effects on marine mammal habitat (e.g., marine mammal prey species, acoustic habitat, or other important physical components of marine mammal habitat); and,

Mitigation and monitoring effectiveness.

Proposed Monitoring Measures

populations, species, or stocks;

Visual monitoring must be performed by qualified, NMFS-approved PSOs. AE must submit PSO resumes for NMFS review and approval prior to commencement of the survey. Resumes should include dates of training and any prior NMFS approval, as well as dates and description of last experience, and must be accompanied by information documenting successful completion of an acceptable training course.

For prospective PSOs not previously approved, or for PSOs whose approval is not current, NMFS must review and approve PSO qualifications. Resumes should include information related to relevant education, experience, and training, including dates, duration, location, and description of prior PSO experience. Resumes must be accompanied by relevant documentation of successful completion of necessary training.

NMFS may approve PSOs as conditional or unconditional. A conditionally-approved PSO may be one who is trained but has not yet attained the requisite experience. An unconditionally-approved PSO is one who has attained the necessary experience. For unconditional approval, the PSO must have a minimum of 90 days at sea performing the role during a geophysical survey, with the conclusion of the most recent relevant experience not more than 18 months previous.

At least one of the visual PSOs aboard the vessel must be unconditionally-approved. One unconditionally-approved visual PSO shall be designated as the lead for the entire PSO team. This lead should typically be the PSO with the most experience, who would coordinate duty schedules and roles for the PSO team and serve as primary point of contact for the vessel operator. To the maximum extent practicable, the duty schedule shall be planned such that unconditionally-approved PSOs are on duty with conditionally-approved PSOs.

At least one PSO aboard each acoustic source vessel must have a minimum of 90 days at-sea experience working in the role, with no more than 18 months elapsed since the conclusion of the at-sea experience. One PSO with such experience must be designated as the lead for the entire PSO team and serve as the primary point of contact for the vessel operator. (Note that the responsibility of coordinating duty schedules and roles may instead be assigned to a shore-based, third-party monitoring coordinator.) To the maximum extent practicable, the lead PSO must devise the duty schedule such that experienced PSOs are

on duty with those PSOs with appropriate training but who have not yet gained relevant experience.

PSOs must successfully complete relevant training, including completion of all required coursework and passing (80 percent or greater) a written and/or oral examination developed for the training program.

PSOs must have successfully attained a bachelor's degree from an accredited college or university with a major in one of the natural sciences, a minimum of 30 semester hours or equivalent in the biological sciences, and at least one undergraduate course in math or statistics. The educational requirements may be waived if the PSO has acquired the relevant skills through alternate experience. Requests for such a waiver shall be submitted to NMFS and must include written justification. Alternate experience that may be considered includes, but is not limited to (1) secondary education and/or experience comparable to PSO duties; (2) previous work experience conducting academic, commercial, or government-sponsored marine mammal surveys; and (3) previous work experience as a PSO (PSO must be in good standing and demonstrate good performance of PSO duties).

AE must work with the selected third-party PSO provider to ensure PSOs have all equipment (including backup equipment) needed to adequately perform necessary tasks, including accurate determination of distance and bearing to observed marine mammals, and to ensure that PSOs are capable of calibrating equipment as necessary for accurate distance estimates and species identification. Such equipment, at a minimum, shall include:

At least one thermal (infrared) imagine device suited for the marine environment;

Reticle binoculars (e.g., 7×50) of appropriate quality (at least one per PSO, plus backups);

Global Positioning Units (GPS) (at least one plus backups);

Digital cameras with a telephoto lens that is at least 300-mm or equivalent on a full-frame single lens reflex (SLR) (at least one plus backups). The camera or lens should also have an image stabilization system;

Equipment necessary for accurate measurement of distances to marine mammal;

Compasses (at least one plus backups);

Means of communication among vessel crew and PSOs; and Any other tools deemed necessary to adequately and effectively perform PSO tasks.

The equipment specified above may be provided by an individual PSO, the third-party PSO provider, or the operator, but AE is responsible for ensuring PSOs have the proper equipment required to perform the duties specified in the IHA.

The PSOs will be responsible for monitoring the waters surrounding the survey vessel to the farthest extent permitted by sighting conditions, including Shutdown Zones, during all HRG survey operations. PSOs will visually monitor and identify marine mammals, including those approaching or entering the established Shutdown Zones during survey activities. It will be the responsibility of the PSO(s) on duty to

communicate the presence of marine

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mammals as well as to communicate the action(s) that are necessary to ensure mitigation and monitoring requirements are implemented as appropriate.

PSOs must be equipped with binoculars and have the ability to estimate distance and bearing to detect marine mammals, particularly in proximity to Shutdown Zones. Reticulated binoculars must also be available to PSOs for use as appropriate based on conditions and visibility to support the sighting and monitoring of marine mammals. During nighttime operations, appropriate night-vision devices (e.g., night-vision goggles with thermal clip-ons and infrared technology) would be used. Position data would be recorded using hand-held or vessel GPS units for each sighting.

During good conditions (e.g., daylight hours; Beaufort sea state (BSS) 3 or less), to the maximum extent practicable, PSOs must also conduct observations when the acoustic source is not operating for comparison of sighting rates and behavior with and without use of the active acoustic sources and between acquisition periods, to the maximum extent practicable. Any observations of marine mammals by crew members aboard the vessel associated with the survey would be relayed to the PSO team. Data on all PSO observations would be recorded based on standard PSO collection requirements (see Proposed Reporting Measures). This would include dates, times, and locations of survey operations; dates and times of observations, location and weather; details of marine mammal sightings (e.g., species, numbers, behavior); and details of any observed marine mammal behavior that occurs (e.g., noted behavioral disturbances). Members of the PSO team shall consult the NMFS NARW reporting system and Whale Alert, daily and as able, for the presence of NARWs throughout survey operations.

Proposed Reporting Measures

AE shall submit a draft comprehensive report to NMFS on all activities and monitoring results within 90 days of the completion of the survey or expiration of the IHA, whichever comes sooner. The report must describe all activities conducted and sightings of marine mammals, must provide full documentation of methods, results, and interpretation pertaining to all monitoring, and must summarize the dates and locations of survey operations and all marine mammals sightings (dates, times, locations, activities, associated survey activities). The draft report shall also include geo-referenced, time-stamped vessel tracklines for all time periods during which acoustic sources were operating. Tracklines should include points recording any change in acoustic source status (e.g., when the sources began operating, when they were turned off, or when they changed operational status such as from full array to single gun or vice versa). GIS files shall be provided in Environmental Systems Research Institute, Inc (ESRI) shapefile format and include the Coordinated Universal Time (UTC) date and time, latitude in decimal degrees, and longitude in decimal

degrees. All coordinates shall be referenced to the WGS84 geographic coordinate system. In addition to the report, all raw observational data shall be made available. The report must summarize the information. A final report must be submitted within 30 days following resolution of any comments on the draft report. All draft and final marine mammal monitoring reports must be submitted to PR.ITP.MonitoringReports@noaa.gov, nmfs.gar.incidental-take@noaa.gov, and ITP.lock@noaa.gov.

PSOs must use standardized electronic data forms to record data. PSOs shall record detailed information about any implementation of mitigation requirements, including the distance of marine mammal to the acoustic source and description of specific actions that ensued, the behavior of the animal(s), any observed changes in behavior before and after implementation of mitigation, and if shutdown was implemented, the length of time before any subsequent ramp-up of the acoustic source. If required mitigation was not implemented, PSOs should record a description of the circumstances. At a minimum, the following information must be recorded:

- Vessel names (source vessel), vessel size and type, maximum speed capability of vessel;
 - 2. Dates of departures and returns to port with port name;
 - 3. PSO names and affiliations;
 - 4. Date and participants of PSO briefings;
 - 5. Visual monitoring equipment used;
- 6. PSO location on vessel and height of observation location above water surface;
- 7. Dates and times (Greenwich Mean Time) of survey on/off effort and times corresponding with PSO on/off effort;
- 8. Vessel location (decimal degrees) when survey effort begins and ends and vessel location at beginning and end of visual PSO duty shifts:
- 9. Vessel location at 30-second intervals if obtainable from data collection software, otherwise at practical regular interval;
- 10. Vessel heading and speed at beginning and end of visual PSO duty shifts and upon any change;
 - 11. Water depth (if obtainable from data collection software);
- 12. Environmental conditions while on visual survey (at beginning and end of PSO shift and whenever conditions change significantly), including BSS and any other relevant weather conditions including cloud cover, fog, sun glare, and overall visibility to the horizon;
- 13. Factors that may contribute to impaired observations during each PSO shift change or as needed as environmental conditions change (e.g., vessel traffic, equipment malfunctions); and
- 14. Survey activity information (and changes thereof), such as acoustic source power output while in operation, number and volume of airguns operating in an array, tow depth of an acoustic source, and any other notes of significance (i.e., pre-start clearance, ramp-up, shutdown, testing, shooting, ramp-up completion, end of operations, streamers, etc.).
- 15. Upon visual observation of any marine mammal, the following information must be recorded:
 - a. Watch status (sighting made by PSO on/off effort, opportunistic,

- crew, alternate vessel/platform);
- b. Vessel/survey activity at time of sighting (e.g., deploying, recovering, testing, shooting, data acquisition, other);
 - c. PSO who sighted the animal;
 - d. Time of sighting;
 - e. Initial detection method;
 - f. Sightings cue;
 - g. Vessel location at time of sighting (decimal degrees);
 - h. Direction of vessel's travel (compass direction);
 - i. Speed of the vessel(s) from which the observation was made;
- j. Identification of the animal (e.g., genus/species, lowest possible taxonomic level or unidentified); also note the composition of the group if there is a mix of species;
- k. Species reliability (an indicator of confidence in identification);
- Estimated distance to the animal and method of estimating distance;
 - m. Estimated number of animals (high/low/best);
- n. Estimated number of animals by cohort (adults, yearlings, juveniles, calves, group composition, etc.);
- o. Description (as many distinguishing features as possible of each individual seen, including length, shape, color, pattern, scars, or markings,

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shape and size of dorsal fin, shape of head, and blow characteristics);

- p. Detailed behavior observations (e.g., number of blows/breaths, number of surfaces, breaching, spyhopping, diving, feeding, traveling; as explicit and detailed as possible; note any observed changes in behavior before and after point of closest approach);
- q. Mitigation actions; description of any actions implemented in response to the sighting (e.g., delays, shutdowns, ramp-up, speed or course alteration, etc.) and time and location of the action;
 - r. Equipment operating during sighting;
- s. Animal's closest point of approach and/or closest distance from the center point of the acoustic source; and
- t. Description of any actions implemented in response to the sighting (e.g., delays, shutdown, ramp-up) and time and location of the action.

If a NARW is observed at any time by PSOs or personnel on the project vessel, during surveys or during vessel transit, AE must report the sighting information to the NMFS NARW Sighting Advisory System (866-755-6622) within 2 hours of occurrence, when practicable, or no later than 24 hours after occurrence. NARW sightings in any location may also be reported to the U.S. Coast Guard via channel 16 and through the WhaleAlert app (http://www.whalealert.org).

In the event that personnel involved in the survey activities discover an injured or dead marine mammal, the incident must be reported to NMFS as soon as feasible by phone (866-755-6622) and by email (nmfs.gar.incidental-take@noaa.gov and PR.ITP.MonitoringReports@noaa.gov). The report must include the

following information:

- Time, date, and location (latitude/longitude) of the first discovery (and updated location information if known and applicable);
- Species identification (if known) or description of the animal(s) involved;
- Condition of the animal(s) (including carcass condition if the animal is dead);
 - 4. Observed behaviors of the animal(s), if alive;
 - 5. If available, photographs or video footage of the animal(s); and
 - 6. General circumstances under which the animal was discovered.

In the event of a ship strike of a marine mammal by any vessel involved in the activities, AE must report the incident to NMFS by phone (866-755-6622) and by email (nmfs.gar.incidental-take@noaa.gov and PR.ITP.MonitoringReports@noaa.gov) as soon as feasible. The report would include the following information:

- 1. Time, date, and location (latitude/longitude) of the incident;
- Species identification (if known) or description of the animal(s) involved;
 - 3. Vessel's speed during and leading up to the incident;
- Vessel's course/heading and what operations were being conducted (if applicable);
 - 5. Status of all sound sources in use;
- 6. Description of avoidance measures/requirements that were in place at the time of the strike and what additional measures were taken, if any, to avoid strike;
- 7. Environmental conditions (e.g., wind speed and direction, Beaufort sea state, cloud cover, visibility) immediately preceding the strike;
 - 8. Estimated size and length of animal that was struck;
- 9. Description of the behavior of the marine mammal immediately preceding and/or following the strike;
- 10. If available, description of the presence and behavior of any other marine mammals immediately preceding the strike;
- 11. Estimated fate of the animal (e.g., dead, injured but alive, injured and moving, blood or tissue observed in the water, status unknown, disappeared); and
- 12. To the extent practicable, photographs or video footage of the animal(s).

Negligible Impact Analysis and Determination

NMFS has defined negligible impact as an impact resulting from the specified activity that cannot be reasonably expected to, and is not reasonably likely to, adversely affect the species or stock through effects on annual rates of recruitment or survival (50 CFR 216.103). A negligible impact finding is based on the lack of likely adverse effects on annual rates of recruitment or survival (i.e., population-level effects). An estimate of the number of takes alone is not enough information on which to base an impact determination. In addition to considering estimates of the number of marine mammals that might be ``taken'' through harassment, NMFS considers other factors, such as the likely nature of any impacts or responses (e.g., intensity, duration),

the context of any impacts or responses (e.g., critical reproductive time or location, foraging impacts affecting energetics), as well as effects on habitat, and the likely effectiveness of the mitigation. We also assess the number, intensity, and context of estimated takes by evaluating this information relative to population status. Consistent with the 1989 preamble for NMFS' implementing regulations (54 FR 40338, September 29, 1989), the impacts from other past and ongoing anthropogenic activities are incorporated into this analysis via their impacts on the baseline (e.g., as reflected in the regulatory status of the species, population size and growth rate where known, ongoing sources of human-caused mortality, or ambient noise levels).

To avoid repetition, the majority of our analysis applies to all the species listed in Table 2, given that some of the anticipated effects of this project on different marine mammal stocks are expected to be relatively similar in nature. Where there are meaningful differences between species or stocks, or groups of species, in anticipated individual responses to activities, impact of expected take on the population due to differences in population status, or impacts on habitat, they are included as separate subsections below. Specifically, we provide additional discussion related to NARW and to other species currently experiencing UMEs.

NMFS does not anticipate that serious injury or mortality would occur as a result from HRG surveys, even in the absence of mitigation, and no serious injury or mortality is proposed to be authorized. As discussed in the Potential Effects of Specified Activities on Marine Mammals and their Habitat section, non-auditory physical effects, auditory physical effects, and vessel strike are not expected to occur. NMFS expects that all potential takes would be in the form of Level B harassment in the form of temporary avoidance of the area or decreased foraging (if such activity was occurring), reactions that are considered to be of low severity and with no lasting biological consequences (e.g., Southall et al., 2007; Ellison et al., 2012).

In addition to being temporary, the maximum expected harassment zone around a survey vessel is 141-m. Therefore, the ensonified area surrounding each vessel is relatively small compared to the overall distribution of the animals in the area and their use of the habitat. Feeding behavior is not likely to be significantly impacted as prey species are mobile and are broadly distributed throughout the survey area; therefore, marine mammals that may be temporarily displaced during survey activities are expected to be able to resume foraging once they have moved away from areas with disturbing levels of underwater noise. Because of the temporary nature of the

[[Page 24572]]

disturbance and the availability of similar habitat and resources in the surrounding area, the impacts to marine mammals and the food sources that they utilize are not expected to cause significant or long-term consequences for individual marine mammals or their populations.

There are no rookeries, mating or calving grounds known to be biologically important to marine mammals within the planned survey area

and there are no feeding areas known to be biologically important to marine mammals within the survey area. There is no designated critical habitat for any ESA-listed marine mammals in the survey area.

North Atlantic Right Whales

The status of the NARW population is of heightened concern and, therefore, merits additional analysis. As noted previously, elevated NARW mortalities began in June 2017 and there is an active UME. Overall, preliminary findings attribute human interactions, specifically vessel strikes and entanglements, as the cause of death for the majority of NARWs. As noted previously, the survey area overlaps a migratory corridor BIA for NARWs that extends from Massachusetts to Florida and from the coast to beyond the shelf break. Due to the fact that the planned survey activities are temporary (will occur for up to 1 year) and the spatial extent of sound produced by the survey would be small relative to the spatial extent of the available migratory habitat in the BIA, NARW migration is not expected to be impacted by the survey. This important migratory area is approximately 269,488 km\2\ in size (compared with the worst case scenario of approximately 6,133 km\2\ of total estimated Level B harassment ensonified area associated with both the Lease Area and the ECR area surveys) and is comprised of the waters of the continental shelf offshore the East Coast of the United States, extending from Florida through Massachusetts.

Given the relatively small size of the ensonified area, it is unlikely that prey availability would be adversely affected by HRG survey operations. Required vessel strike avoidance measures will also decrease risk of ship strike during migration; no ship strike is expected to occur during AE's planned activities. Additionally, only very limited take by Level B harassment of NARWs has been requested and is being proposed for authorization by NMFS as HRG survey operations are required to maintain and implement a 500-m shutdown zone. The 500-m shutdown zone for NARWs is conservative, considering the Level B harassment isopleth for the most impactful acoustic source (i.e., sparker) is estimated to be 141-m, and thereby minimizes the intensity and duration of any potential incidents of behavioral harassment for this species. As noted previously, Level A harassment is not expected due to the small estimated zones in conjunction with the aforementioned shutdown requirements. NMFS does not anticipate NARWs takes that would result from AE's proposed activities would impact annual rates of recruitment or survival. Thus, any takes that occur would not result in population level impacts.

Other Marine Mammal Species With Active UMEs

As noted previously, there are several active UMEs occurring in the vicinity of AE's survey area. Elevated humpback whale mortalities have occurred along the Atlantic coast from Maine through Florida since January 2016. Of the cases examined, approximately half had evidence of human interaction (ship strike or entanglement). The UME does not yet provide cause for concern regarding population-level impacts. Despite

the UME, the relevant population of humpback whales (the West Indies breeding population, or DPS) remains stable at approximately 12,000 individuals.

Beginning in January 2017, elevated minke whale strandings have occurred along the Atlantic coast from Maine through South Carolina, with highest numbers in Massachusetts, Maine, and New York. This event does not provide cause for concern regarding population level impacts, as the likely population abundance is greater than 20,000 whales.

Elevated numbers of harbor seal and gray seal mortalities were first observed between 2018-2020 and, as part of a separate UME, again in 2022. These have occurred across Maine, New Hampshire, and Massachusetts. Based on tests conducted so far, the main pathogen found in the seals is phocine distemper virus (2018-2020) and avian influenza (2022), although additional testing to identify other factors that may be involved in the UMEs is underway. The UMEs do not provide cause for concern regarding population-level impacts to any of these stocks. For harbor seals, the population abundance is over 60,000 and annual M/SI (339) is well below PBR (1,729) (Hayes et al., 2023). The population abundance for gray seals in the United States is over 27,000, with an estimated abundance, including seals in Canada, of approximately 450,000. In addition, the abundance of gray seals is likely increasing in the U.S. Atlantic as well as in Canada (Hayes et al., 2021; Hayes et al., 2023).

The required mitigation measures are expected to reduce the number and/or severity of takes for all species listed in Table 2, including those with active UMEs, to the level of least practicable adverse impact. In particular, they would provide animals the opportunity to move away from the sound source before HRG survey equipment reaches full energy, thus preventing them from being exposed to sound levels that have the potential to cause injury. No Level A harassment is anticipated, even in the absence of mitigation measures, or proposed for authorization.

NMFS expects that takes would be in the form of short-term Level B harassment by way of brief startling reactions and/or temporary vacating of the area, or decreased foraging (if such activity was occurring)--reactions that (at the scale and intensity anticipated here) are considered to be of low severity, with no lasting biological consequences. Since both the sources and marine mammals are mobile, animals would only be exposed briefly to a small ensonified area that might result in take. Additionally, required mitigation measures would further reduce exposure to sound that could result in more severe behavioral harassment.

In summary and as described above, the following factors primarily support our preliminary determination that the impacts resulting from this activity are not expected to adversely affect any of the species or stocks through effects on annual rates of recruitment or survival:

No serious injury or mortality is anticipated or proposed to be authorized;

No Level A harassment (PTS) is anticipated, even in the absence of mitigation measures, or proposed to be authorized; Foraging success is not likely to be significantly impacted as effects on species that serve as prey species for marine

mammals from the survey are expected to be minimal;

The availability of alternate areas of similar habitat value for marine mammals to temporarily vacate the ensonified areas during the planned survey to avoid exposure to sounds from the activity;

Take is anticipated to be by Level B harassment only consisting of brief startling reactions and/or temporary avoidance of the ensonified area;

Survey activities would occur in such a comparatively small portion of the BIA for the NARW migration that any avoidance of the area due to survey

[[Page 24573]]

activities would not affect migration. In addition, mitigation measures require shutdown at $500\,\text{m}$ (almost four times the size of the Level B harassment zone of $141\,\text{m}$) to minimize the effects of any Level B harassment take of the species; and

The proposed mitigation measures, including visual monitoring and shutdowns, are expected to minimize potential impacts to marine mammals.

Based on the analysis contained herein of the likely effects of the specified activity on marine mammals and their habitat, and taking into consideration the implementation of the monitoring and mitigation measures, NMFS preliminarily finds that the total marine mammal take from the proposed activity will have a negligible impact on all affected marine mammal species or stocks.

Small Numbers

As noted previously, only take of small numbers of marine mammals may be authorized under sections 101(a)(5)(A) and (D) of the MMPA for specified activities other than military readiness activities. The MMPA does not define small numbers and so, in practice, where estimated numbers are available, NMFS compares the number of individuals taken to the most appropriate estimation of abundance of the relevant species or stock in our determination of whether an authorization is limited to small numbers of marine mammals. When the predicted number of individuals to be taken is fewer than one-third of the species or stock abundance, the take is considered to be of small numbers. Additionally, other qualitative factors may be considered in the analysis, such as the temporal or spatial scale of the activities.

NMFS proposes to authorize incidental take by Level B harassment only of 15 marine mammal species with 16 managed stocks. The total amount of takes proposed for authorization is less than 6 percent relative to the best available population abundance for any of the 16 managed stocks (highest being for the Western North Atlantic Migratory Coastal Stock of Bottlenose dolphins) (Table 4). The take numbers proposed for authorization are considered conservative estimates for purposes of the small numbers determination as they assume all takes represent different individual animals, which is unlikely to be the case.

Based on the analysis contained herein of the proposed activity (including the proposed mitigation and monitoring measures) and the anticipated take of marine mammals, NMFS preliminarily finds that small numbers of marine mammals would be taken relative to the population size of the affected species or stocks.

Unmitigable Adverse Impact Analysis and Determination

There are no relevant subsistence uses of the affected marine mammal stocks or species implicated by this action. Therefore, NMFS has determined that the total taking of affected species or stocks would not have an unmitigable adverse impact on the availability of such species or stocks for taking for subsistence purposes.

Endangered Species Act

Section 7(a)(2) of the Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 et seq.) requires that each Federal agency insure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat. To ensure ESA compliance for the issuance of IHAs, NMFS consults internally whenever we propose to authorize take for endangered or threatened species.

NMFS Office of Protected Resources (OPR) is proposing to authorize take of four species of marine mammals which are listed under the ESA, including the North Atlantic right, fin, sei, and sperm whale, and has determined that these activities fall within the scope of activities analyzed in NMFS Greater Atlantic Regional Fisheries Office's (GARFO) programmatic consultation regarding geophysical surveys along the U.S. Atlantic coast in the three Atlantic Renewable Energy Regions (completed June 29, 2021; revised September 2021).

Proposed Authorization

As a result of these preliminary determinations, NMFS proposes to issue an IHA to AE for conducting marine site characterization surveys in coastal waters off of New York and New Jersey in the New York Bight for a period of 1 year, provided the previously mentioned mitigation, monitoring, and reporting requirements are incorporated. A draft of the proposed IHA can be found at: https://www.fisheries.noaa.gov/national/marine-mammal-protection/incidental-take-authorizations-other-energy-activities-renewable.

Request for Public Comments

We request comment on our analyses, the proposed authorization, and any other aspect of this notice of proposed IHA. We also request comment on the potential renewal of this proposed IHA as described in the paragraph below. Please include with your comments any supporting data or literature citations to help inform decisions on the request for this IHA or a subsequent renewal IHA.

On a case-by-case basis, NMFS may issue a one-time, 1-year renewal

IHA following notice to the public providing an additional 15 days for public comments when (1) up to another year of identical or nearly identical activities as described in the Description of Proposed Activity section of this notice is planned or (2) the activities as described in the Description of Proposed Activity section of this notice would not be completed by the time the IHA expires and a renewal would allow for completion of the activities beyond that described in the Dates and Duration section of this notice, provided all of the following conditions are met:

A request for renewal is received no later than 60 days prior to the needed renewal IHA effective date (recognizing that the renewal IHA expiration date cannot extend beyond 1 year from expiration of the initial IHA).

The request for renewal must include the following:

- (1) An explanation that the activities to be conducted under the requested renewal IHA are identical to the activities analyzed under the initial IHA, are a subset of the activities, or include changes so minor (e.g., reduction in pile size) that the changes do not affect the previous analyses, mitigation and monitoring requirements, or take estimates (with the exception of reducing the type or amount of take).
- (2) A preliminary monitoring report showing the results of the required monitoring to date and an explanation showing that the monitoring results do not indicate impacts of a scale or nature not previously analyzed or authorized.

Upon review of the request for renewal, the status of the affected species or stocks, and any other pertinent information, NMFS determines that there are no more than minor changes in the activities, the mitigation and monitoring measures will remain the same and appropriate, and the findings in the initial IHA remain valid.

Dated: April 18, 2023.
Kimberly Damon-Randall,
Director, Office of Protected Resources, National Marine Fisheries
Service.
[FR Doc. 2023-08504 Filed 4-20-23; 8:45 am]
BILLING CODE 3510-22-P



Alternative Energy, LLC Comments

1 message

> To: ITP.lock@noaa.gov

Mon, May 22, 2023 at 10:11 PM

Dear Jolie Harrison,

The loss of one marine mammal to offshore wind exploration is horrible. The sacrifice over nine thousand marine mammals for one project is beyond comprehension. I am absolutely against this rapid, thoughtless, improperly researched, and non-sustainable project. Please protect our oceans and marine life from this harassment and destruction. We can and should do better. Offshore wind is simply not the answer to our climate change problems.

Jessica Lisa, Ph.D. Assistant Professor of Biology Department of Biology Georgian Court University

"It doesn't make any sense if you think we're the most intellectual creature on the planet, that we're destroying our only home," Jane Goodall, Ph.D.



88 FR 24553 document number 2023-08504

1 message

> To: ITP.lock@noaa.gov

Tue, May 2, 2023 at 11:25 AM

It is my opinion that allowing concurrent use of multiple survey ships increases the likely hood of a Taking actually occurring. Only one ship at a time should be permitted to actively emit sound for survey data collection, additional receivers would be relatively passive. This includes working within 200 nautical miles of other survey ships in nearby lease areas.

The societal benefit of reducing global warming is not achieved by wind energy for two reasons. The supporting argument of "renewable energy sources" is overrated in that typical residences far exceed the 4 Kilowatt demand frequently used by the state of new Jersey and the 3 Kilowatt demand recently used by the Federal Government, given that a typical water heater is 4.3 KW and the Ford Home Electric Vehicle Charger is 16 Kw. Secondly, dispatchable electric generation needed for when the wind generation is not producing must be kept operating since it frequently takes in excess of 20 hours to bring online.

John A Feairheller, Jr, PE, PP

Ocean City, NJ



STOP THE HARASSMENT OF 9,086 MARINE MAMMALS BY "LEVEL B" FOR THE MARINE SITE CHARACTERIZATION SURVEYS FOR ATTENTIVE ENERGY, LLC,

1 message

> To: "ITP.lock@noaa.gov" <itp.lock@noaa.gov

Mon, May 22, 2023 at 12:59 PM

Jolie Harrison Chief, Permits and Conservation Division Office of Protected Resources National Marine Fisheries Service

Recently, an important report and a federal "opinion" were issued about the impacts of offshore wind (OSW) development on marine resources that validate the need for good science and due diligence. This new information supports Clean Ocean Action's call for a comprehensive, independent, reasonable, and responsible pilot project to understand the impacts of OSW development on marine and coastal ecosystems prior to large-scale industrialization of the ocean.

First, the <u>report</u> "Fisheries and Offshore Wind Interactions: Synthesis of Science," jointly authored by the Responsible Offshore Development Alliance (RODA), and representatives from the Bureau of Ocean Energy Management (BOEM) and National Marine Fisheries Service (NMFS), reviews current and past scientific research examining "the interactions between OSW, fisheries, and the marine ecosystems." What is clear from this report is that critical information is still needed on offshore wind impacts, especially on a cumulative scale to marine ecosystems. Some important findings from the report:

- "Because the local effects of benthic habitat modification are multiplied many times within and between OSW development areas, these installations can have population-level effects on regional spatial scales."
- "The impacts on fish species from changes in upwelling, habitat type, and ocean circulation are largely unknown, including cumulative effects."
- "The effects of EMF emissions from high voltage OSW cables on electrically and magnetically sensitive marine fishes are largely unknown."

Second, a recent, disturbing "biological opinion" announcement by NMFS states that Ocean Wind 1 – the 98-turbine offshore wind project off southern New Jersey – is "likely to adversely affect, but is not likely to jeopardize, the continued existence of any species of ESA-listed whales, sea turtles, or Atlantic sturgeon or destroy or adversely modify any designated critical habitat." This includes the critically endangered North Atlantic right whale, of which there are less than 340 left on Earth. The less than one page opinion was absent analysis, and no document was immediately released for public review until a 600-page document was released days after the announcement.

"Not likely to jeopardize the continued existence" of any endangered marine life, does not exude confidence; in fact, it is alarming. Anyone concerned about ocean life should demand the precautionary principle. This "opinion" is especially important since there are dozens of projects with thousands of wind turbines progressing rapidly in the region. Prior to further development, more scientific evidence is needed to ensure the protection of the marine environment.

Have you also considered the livelihood of the commercial and recreational fishing communities? Have you completed any long term studies to the potential changes in those communities? Have you reviewed the changes to the pollock fisheries in Europe after the completion of offshore wind turbines? Or to the changes

5/23/23, 7:56 AM National Oceanic and Atmospheric Administration Mail - STOP THE HARASSMENT OF 9,086 MARINE MAMMALS BY "LEVEL B" FOR THE MARINE SITE CHARACTERIZATION ...

in flounder migration with the installation of high voltage ocean cables? This should be more than a political "yes" to appease the powers that be. This could be devastating to the area that lasts lifetimes.

Regards,



Stop the turbine project

1 message

To: itp.lock@noaa.gov

Mon, May 22, 2023 at 7:54 PM

Stop this carnigage immediately Whales are more important



NY Wind

Sat, May 13, 2023 at 3:15 PM

To: "itp.lock@noaa.gov" <itp.lock@noaa.gov>

Jolie Harrison chief, permits and conservation division Office of protected resources National marine fisheries services

I hope this email finds you well. I would like to express my deep concern with the current authorization, allowing harassment, and or harm of the noted marine life attached with this email

I can't in good faith, comprehend how endangered species are allowed on this list. The endangered right whale, which proposed is allowed harassment of 12, doesn't even produce 12 Calves a season

allowing this project to go forward will forever change the beautiful north east coast line.

Climate change and energy is a very big crisis in this country however, industrializing the ocean with wind turbines is not the solution

Just doing the basic math the cost associated with installing the turbines and maintaining them will not produce enough return in energy to make them a feasible solution to our energy crisis

They do not decrease our need a fossil fuels, as fossil fuels are required to run them.

We have already seen an unprecedented amount of marine life death with just the current surveying. A 600% increase in current years has sent a shockwave through the normal community.

Why does the government not seem concerned? Who are the voice of the people and yet the only people you seem to be listening to are the ones with big dollars

I have spent the greater part of 50 years living at the beach, and in all of that time have not seen the devastation in sea life that is occurring.

I am asking you please to reconsider this project.

this is not the solution to our energy crisis. This will not help our needs, on the contrary, it will destroy the ocean, it will destroy peoples livelihood as you decimate the fishing industry, and with the interference in radar, potentially put our coastline in jeopardy.

You know what's right. And if you do not know what is right then you do not belong in this job.

Respectfully, yours

INCIDENTAL TOTAL TAKES OF KILLS OF 24 OCS-A LEASES			
MARINE MAMMAL SPECIES	TOTAL STOCK SIZE OF SPECIES	TOTAL OF ALL LEASE TAKES	TOTAL % OF STOCK SIZE
	**	<u>/</u>	7
WHALES - Mysticetes	3	EST: 0	
Fin, Endangered	6,802		10.16%
Humpback	1,396	ii ii	53.37%
Minke	21,968	4137.777.403.4927.4	5.95%
North Atlantic Right, Endangered	338	-	102.99%
Sei, Endangered	6,292	All In Colombia	2.16%
Blue Whales, Endangered	412	21	5.10%
TOTAL Whales	37,208		8.73%
Total Endangered Whales	13,844	1,196	8.64%
DOLPHINS - Odontocetes	Ť		-
Atlantic Spotted	39,921	2,137	5.35%
Atlantic White-Sided	93,233		7.49%
Bottlenose, Offshore	62,851	8,840	14.07%
Bottlenose, Coastal	6,639	6,109	92.02%
Bottlenose, Offshore & Coastal	69,490	24,757	35.63%
Short-Beaked Common	172,974	73,316	42.39%
Long-finned Pilot Whales	39,215	1,152	2.94%
Short-finned Pilot Whales	1,981	257	12.97%
Risso's	35,215	806	2.29%
Sperm Whale, Endangered	4,349	371	8.53%
TOTAL DOLPHINS	525,868	124,727	23.72%
PORPOISE, Harbor	95,543	11,957	12.51%
SEAL - Pinnipeds	1		
SEAL - Fillilipeds		·	