

Finding of No Significant Impact for the Issuance of an Incidental Harassment Authorization to Garden State Offshore Energy LLC For Take of Marine Mammals Incidental to Marine Site Characterization Surveys

I. INTRODUCTION AND PURPOSE

The National Marine Fisheries Service (NMFS) received applications from Garden State Offshore Energy LLC (GSOE) and Deepwater Wind New England LLC (DWWNE)¹ requesting authorization for the take of marine mammals incidental to marine site characterization surveys associated with offshore wind energy development site characterization in the Outer Continental Shelf (OCS) of the Atlantic Ocean (Project Area). Thus, NMFS is required to review applications and, if appropriate, issue Incidental Take Authorizations (ITAs) pursuant to the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1361 et seq.). In addition, the National Environmental Policy Act (NEPA), 40 Code of Federal Regulations (CFR) Parts 1500 -1508, and National Oceanic and Atmospheric Administration (NOAA) policy and procedures² require all proposals for major federal actions be reviewed with respect to environmental consequences on the human environment. The purpose of this document is to address the determination to analyze the issuance of ITAs for the take of marine mammals incidental to both companies' proposed surveys in a single Environmental Assessment (EA) for our consideration to issue separate Incidental Harassment Authorizations (IHAs) and provide the evaluation that issuance of an IHA to GSOE will not significantly impact the quality of the human environment.

II. BACKGROUND

GSOE is planning to conduct geophysical and geotechnical (G&G) survey activities off the coast of Delaware in the area of the Commercial Lease of Submerged Lands for Renewable Energy Development OCS (OCS-A 0482) and along potential submarine cable routes to a landfall location in Maryland or Delaware. DWWNE is planning to conduct their G&G survey activities off the coast of Massachusetts and Rhode Island in the area of the Commercial Lease of Submerged Lands for Renewable Energy Development OCS (OCS-A 0486) and along potential submarine cable routes to a landfall location in either Rhode Island, Massachusetts or New York.

GSOE and DWWNE plan to conduct high-resolution geophysical (HRG) and geotechnical surveys to support the characterization of the existing seabed and subsurface geological conditions for future offshore wind energy development in the Northwest Atlantic Ocean. This will include the use of multi-beam depth sounders, side-scan sonars, sub-bottom profilers, marine magnetometers, vibracores, deep boring cores and cone penetration tests.

GSOE's survey activities off the coast of Delaware will last for approximately 183 days and DWWNE's survey activities off the coasts of Massachusetts and Rhode Island will last

¹ Both companies are subsidiary companies of Deepwater Wind. Deepwater Wind is a developer headquartered in Providence, Rhode Island that is actively planning offshore wind energy projects to serve multiple East Coast locations ~15 or more miles offshore, including areas offshore of New York, Massachusetts, Rhode Island, Maryland, and New Jersey.

² NOAA Administrative Order (NAO) 216-6A "Compliance with the National Environmental Policy Act, Executive Orders 12114, Environmental Effects Abroad of Major Federal Actions; 1 1988 and 13690, Floodplain Management; and 11990, Protection of Wetlands" issued April 22, 2016 and the Companion Manual for NAO 216-6A "Policy and Procedures for Implementing the National Environmental Policy Act and Related Authorities" issued January 13, 2017

approximately 200 days. However, the start dates for each of these surveys will be different. Initially, both GSOE and DWWNE planned to begin their surveys in May 2018. However, after applications were submitted and before NMFS published a proposed IHA, DWWNE informed NMFS their planned survey would not start until at least June 15, 2018. While the companies' planned survey activities differ in terms of survey dates, duration, and specific survey locations, both companies are using the same types of survey equipment and will be conducting similar survey efforts in the Northwest Atlantic Ocean (e.g., similar geography).

Since the types of equipment proposed for use by GSOE and DWWNE during marine site characterization surveys have the potential to result in marine mammal harassment as a result of the input of sound into the marine environment, these activities qualify for an authorization under the MMPA. Also, as noted above, the start dates for each of these surveys are different. Therefore, NMFS is proposing to issue separate IHAs to GSOE and DWWNE pursuant to Section 101(a)(5)(D) of the MMPA and 50 Code of Federal Regulations (CFR) Part 216² for the take of marine mammals incidental to these surveys. The MMPA criteria for issuance of an IHA require that the taking of marine mammals authorized by an IHA will have a negligible impact on the species or stock(s), and, where relevant, will not have an unmitigable adverse impact on the availability of the species or stock(s) for subsistence uses. In addition, only small numbers of takes may be authorized and the IHA must set forth the permissible methods of taking, other means of effecting the least practicable adverse impact on the species or stock and its habitat, and requirements pertaining to the monitoring and reporting of such takings.

NMFS' proposed action is a direct outcome of GSOE's and DWWNE's requests for IHAs to authorize takes of marine mammals incidental to planned marine site characterization survey activities. However, since the start dates for each of these applicants' planned surveys changed since the initial applications were submitted, NMFS published a proposed IHA for GSOE's survey in the Federal Register on April 4, 2018 and the proposed IHA for DWWNE's survey on May 4, 2018 (83 FR 19711). The IHA for GSOE will be valid from May 15, 2018 through May 14, 2019 and authorizes takes, by Level B harassment, of small numbers of marine mammals incidental to the marine site characterization survey off the coast of Delaware. The proposed IHA for DWWNE is in progress and the environmental review for the issuance of DWWNE's IHA will be completed before their final IHA is issued.

NMFS's issuance of an IHA to GSOE authorizing the taking of marine mammals, consistent with provisions under the MMPA and incidental to the applicant's lawful activities, is a major federal action. Although each independent action is considered a major federal action under NEPA, NMFS exercised its discretion to analyze the actions as "similar actions" in a single EA due to similar activity type and geography, and for efficiency and consistency, as encouraged by the regulations published by CEQ (40 CFR 1508.25(a)(3)). This EA addresses the potential environmental impacts of two alternatives to meet NMFS's purpose and need:

- Alternative 1 (Preferred Alternative): Under the Preferred Alternative, NMFS would issue individual IHAs to GSOE and DWWNE to authorize the take, by Level B harassment, of marine mammals during the site characterization surveys, taking into account the prescribed means of take, mitigation measures, and monitoring requirements.
- Alternative 2 (No Action Alternative): For NMFS, denial of an MMPA authorization constitutes the NMFS No Action Alternative, which is consistent with our statutory

obligation under the MMPA to grant or deny incidental take authorization requests and to prescribe mitigation, monitoring, and reporting in any authorizations granted. Under NMFS's No Action Alternative, NMFS would not issue IHAs, and NMFS assumes GSOE and DWWNE would not conduct their planned surveys. The No Action Alternative served as a baseline in the EA against which the impacts of the Preferred Alternative were compared and contrasted.

This Finding of No Significant Impact (FONSI) evaluates the context and intensity of the impacts of the selected alternative—Alternative 1 (Preferred Alternative)—in NMFS's Final EA (“Issuance of Incidental Harassment Authorizations for Marine Site Characterization Surveys Associated with Wind Energy Development in the Atlantic Ocean”). Information within the EA that is specific to descriptions in the “Analysis Summary” is incorporated by reference per 40 CFR 1502.21. The EA and this FONSI were prepared in accordance with NEPA, CEQ Regulations and NOAA policy and procedures.

III. ANALYSIS SUMMARY

The CEQ Regulations state that the significance of an action be analyzed in terms of both “context” and “intensity” and lists ten criteria for intensity. The Companion Manual for NAO 216-6A requires consideration of CEQs context and intensity criteria (40 CFR 1508.27(a) and 40 CFR 1508.27(b)) along with six additional factors for determining whether the impacts of a proposed action are significant. Each criterion is discussed below with respect to NMFS's proposed action and is considered individually as well as in combination with the others.

1. Can the proposed action reasonably be expected to cause both beneficial and adverse impacts that overall may result in a significant effect, even if the effect will be beneficial?

NMFS' proposed action is not expected to cause either beneficial or adverse impacts resulting in any significant effects. NMFS is proposing to authorize take of marine mammals incidental to marine site characterization surveys. Therefore, impacts from NMFS' proposed action are expected to be predominantly to marine mammals, which, if affected, would be through the introduction of sound into the marine environment during GSOE's surveys. The equipment used during the survey activities emit noise into the water column, which has the potential to behaviorally disturb marine mammals. Given their reliance on sound for basic biological functioning (e.g., foraging, mating), marine mammals are the species most vulnerable to increased noise in the marine environment, although marine mammal prey (e.g., fish and squid) may be impacted in some of the same ways. However, NMFS expects its action to have only intermittent, localized impacts on marine mammals and their habitat, because the survey is short-term and temporary. While NMFS predicts adverse effects to individuals it does not anticipate population-level effects that would rise to the level of significance.

2. Can the proposed action reasonably be expected to significantly affect public health or safety?

NMFS' proposed action only affects the marine mammals that are the subject of the IHA and does not involve or expose the public directly (e.g., chemicals, noise) or indirectly (e.g., food sources) in any manner linked to causing adverse effects to the quality of the environment or well-being of humans. The underlying activity (e.g., GSOE's survey activities) that will occur

off the coast of Delaware does not involve the public and human activities in this area primarily involves shipping activities, which should not be affected by GSOE's survey activities.

3. Can the proposed action reasonably be expected to result in significant impacts to unique characteristics of the geographic area, such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas?

NMFS' proposed action only affects the marine mammals that are the subject of the IHA and is not expected to result in impacts to unique or ecologically critical areas in the offshore area of Delaware where GSOE's survey activities will occur. Since the underlying activity is temporary and of relatively short duration, public recreational uses that may occur in the area will not be significantly affected. GSOE's survey activities will occur only within specified areas offshore of Delaware, away from any existing structures.

4. Are the proposed action's effects on the quality of the human environment likely to be highly controversial?

NMFS' issuance of an IHA will not have effects on the quality of the human environment that are likely to be highly controversial because the proposed action only affects the marine mammals that are the subject of the IHA and there is no substantial debate over the size, nature, or effect of the proposed action's effects on marine mammals. In addition, during the public comment period on the proposed IHA for GSOE's survey activities, NMFS received comments from the Marine Mammal Commission and from a group of non-governmental organizations, which did not indicate that the environmental effects of NMFS' action were likely to be highly controversial.

5. Are the proposed action's effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

The issuance of the IHA to GSOE will not result in environmental effects on the human environment that are uncertain, unique or unknown because the take of marine mammals incidental to GSOE's activities would be of limited duration, and in a limited geographic location, as required in the IHA. In addition, the underlying activities authorized by the IHA are well understood and thoroughly documented; prior authorizations and analyses demonstrate the issuance of incidental take authorizations for this type of activity only affect the marine mammals that are the subject of the authorization.

6. Can the proposed action reasonably be expected to establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration?

The issuance of the IHA to GSOE for the take of marine mammals incidental to planned survey activities may inform the environmental review for future projects, but would not establish a precedent or represent a decision in principle about future actions. NMFS' actions under MMPA Section 101(a)(5)(A) and (D) are considered individually and are based on the best available scientific information, which is continuously evolving, and requests for authorizations are evaluated on their own merits relative to the criteria established in the MMPA and 50 CFR Part 216 on a case-by-case basis. Therefore, issuance of an authorization to a specific entity for a given activity does not guarantee or imply that NMFS will issue future authorizations upon

request in relation to similar activities. For these reasons, the issuance of this IHA to GSOE would not set a precedent or represent a decision in principle about a future consideration.

7. Is the proposed action related to other actions that when considered together will have individually insignificant but cumulatively significant impacts?

The incremental impact of an IHA issued to GSOE for their planned survey activities would not be expected to result in a significant cumulative impact to marine mammal species or populations taking into account past, present, and reasonably foreseeable future activities. The potential impacts to marine mammals, their habitats, and the human environment are expected to be minimal, based on the limited spatial and temporal nature of the activities authorized by NMFS, and the mitigation and monitoring requirements, in the IHA. The cumulative effects of the proposed action on the affected marine mammal populations, when added to the effects of other human-related activities affecting marine mammal species in the Project Area, including climate change, disease, fisheries, vessel traffic, marine mammal watching, and geophysical and geotechnical surveys, are not expected to be significant.

8. Can the proposed action reasonably be expected to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?

The proposed action is not likely to adversely affect districts, sites, highways, structures or objects listed in or eligible in the NRHP because there are no such places within the Project Area. Traditional resources would not be impacted. Potential impacts to cultural resources are considered to be negligible or non-existent.

9. Can the proposed action reasonably be expected to have a significant impact on endangered or threatened species, or their critical habitat as defined under the Endangered Species Act of 1973?

NMFS determined there are four species of marine mammals listed under the ESA that occur in the Project Area and that may be affected by GSOE's proposed surveys: the North Atlantic right, fin, sei and sperm whale. NMFS' proposed action is not expected to have significant impacts on endangered or threatened species or their critical habitat, as NMFS determined the take of marine mammals authorized in the IHA would be limited to behavioral disturbance which would be short term and temporary. The authorized take of marine mammals is not expected to affect reproductive fitness or survivorship in any marine mammals, and no injury or mortality of any marine mammals is expected or authorized in the IHA. Thus, the take of marine mammals authorized in the IHA would not result in population-level effects. In addition, under Section 7 of the ESA, NMFS's Permits and Conservation Division requested initiation of consultation with the NMFS Greater Atlantic Regional Fisheries Office (GARFO) on March 19, 2018, for the issuance of this IHA to GSOE. On May 15, 2018, NMFS GARFO issued a Letter of Concurrence that concluded the issuance of the IHA to GSOE was not likely to adversely affect any ESA-listed species or the critical habitat of any ESA-listed species.

10. Can the proposed action reasonably be expected to threaten a violation of Federal, state, or local law or requirements imposed for environmental protection?

NMFS' compliance with environmental laws and regulations is based on NMFS' proposed action and the nature of an applicant's proposed activities. The issuance of this IHA would not violate any federal laws for environmental protection, as NMFS has engaged in consultation and conducted analyses as necessary to ensure compliance with relevant environmental protection laws. NMFS' Office of Protected Resources initiated consultation under section 7 of the ESA with NMFS GARFO to consider the effects of issuance of the IHA to Deepwater Wind. There are no other environmental laws, regulations, consultations, federal permits or licenses applicable to NMFS for issuance of this IHA to GSOE. However, it is GSOE's responsibility to secure any other necessary permits, licenses and approvals.

11. Can the proposed action reasonably be expected to adversely affect stocks of marine mammals as defined in the Marine Mammal Protection Act?

The issuance of this IHA would authorize GSOE to take marine mammals by harassment, as defined by the MMPA, incidental to marine site characterization survey activities. However, while take of individuals is expected, we do not expect adverse impacts at the population level, including stocks of marine mammals. Effects on individuals or groups of animals does not necessarily translate into an adverse effect to a stock or species, unless such effects result in reduced fitness for those individuals and, ultimately, accrue to the point that there is reduced reproduction or survival leading to effects on annual rates of recruitment or survival for the species. Adverse effects on stocks could potentially result from direct mortality or serious injury or from harassment impacting critical biological functioning and behaviors, such as feeding, mating, calving, or communicating, in a manner that reduces reproductive fitness or survivorship in enough individuals to negatively affect population rates. The loss or serious injury of an individual, or significant reductions in health or reproductive rates, could trigger population impacts if birth rates or emigration do not offset the loss of individuals. For this proposed activity, impacts to marine mammals would occur through noise exposure from equipment used during GSOE's surveys and associated increases in ambient noise. However, effects would be limited to behavioral harassment; this behavioral harassment is not expected to affect reproductive fitness or survivorship in any marine mammals, and no injury or mortality of any marine mammals is expected or authorized in the IHA. Thus, no adverse impacts at the population level, including stocks of marine mammals, are expected.

12. Can the proposed action reasonably be expected to adversely affect managed fish species?

NMFS expects the issuance of an IHA to GSOE for the take of marine mammals incidental to conducting marine site characterization activities may result in short-term, temporary and minor impacts to some managed fish species. No gear type associated with GSOE's surveys is anticipated to physically impact important habitat for managed fish species. The survey equipment used by GSOE would introduce noise to the marine environment, thus there is the potential to result in avoidance by fish of the area around the survey activities. While individual fish may be temporarily impacted by noise from use GSOE's survey equipment by avoiding the area, such impacts are expected to be short-term and temporary. In addition, marine mammals have not been identified as a prey component of managed fish species in this area, so authorizing the incidental take of marine mammals will not reduce the quantity and/or quality of EFH (see related response to question 13 below).

13. Can the proposed action reasonably be expected to adversely affect essential fish habitat as defined under the Magnuson-Stevens Fishery Conservation and Management Act?

NMFS' proposed action only affects the marine mammals that are the subject of the IHA and does not affect essential fish habitat. GSOE's proposed survey may result in temporarily elevated noise levels within the survey area, but this will be short in duration and intermittent within any specific area. Therefore, authorizing the take of marine mammals is unlikely to affect water quality or substrate necessary to provide spawning, feeding, breeding or growth to maturity functions for managed fish. In addition, based on NMFS' Office of Habitat Conservation 2017 guidance concerning incidental take authorizations and EFH, we determined the issuance of the IHA to GSOE will not result in adverse impacts to EFH and that consultation per Section 305(B)(2) of the MSA as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267) is not required.

14. Can the proposed action reasonably be expected to adversely affect vulnerable marine or coastal ecosystems, including but not limited to, deep coral ecosystems?

As described elsewhere in this document, the impact from our action is limited to impacts to marine mammals and their habitat, due to the potential increased noise levels into the marine environment during the proposed surveys. NMFS does not anticipate that the proposed action would result in any permanent effects on the habitats used by the marine mammals in the project area, including the food sources they use (*i.e.*, fish and invertebrates) and does not anticipate that the proposed activity would have any habitat-related effects that could cause significant or long-term consequences for individual marine mammals or their populations. Any noise impact is expected to be sporadic, temporary, and localized given a mobile sound source over a broad area. Thus, short-term minor effects may occur but are not expected to rise to the level of significance. No deep coral ecosystems exist in the Project Area.

15. Can the proposed action reasonably be expected to adversely affect biodiversity or ecosystem functioning (e.g., benthic productivity, predator-prey relationships, etc.)?

As described elsewhere in this document, impacts from NMFS' proposed action are limited to the marine mammals that are the subject of the IHA. While marine mammals play a critical role in marine ecosystems, including those in the Project Area, the adverse effects of the proposed action on marine mammals would be limited to short-term behavioral responses that would be temporary and localized. The proposed action would not result in injury or in harassment that would have the potential to impact critical biological functions and behaviors, such as feeding, mating, calving, or communicating in a manner that reduces reproductive fitness or survivorship, and thus would not have the potential to result in population-level impacts to marine mammals. Thus the function of marine mammals in the ecosystem would not be affected by the proposed action. Again, any adverse effects are expected to be short-term, temporary and minor. Any potential impacts to fish are expected to be temporary and localized, and result in short-term displacement at most. Impacts are not expected to affect predator-prey relationships or otherwise impact any form of benthic productivity. Thus NMFS' proposed action cannot reasonably be expected to affect biodiversity or ecosystem functioning within the affected environment.

16. Can the proposed action reasonably be expected to result in the introduction or spread of a nonindigenous species?

As described elsewhere in this document, impacts from NMFS' proposed action are limited to the marine mammals that are the subject of the IHA. The underlying action (e.g., GSOE's proposed surveys) do not involve methods known or likely to result in the introduction or spread of non-indigenous species, such as through ballast water exchange. Sufficient precautionary measures may be taken by GSOE to prevent the introduction, continued existence, or spread of noxious organisms or other non-native species. Therefore, it is not likely that NMFS' issuance of an IHA would promote or result in the introduction or spread of invasive species at a level that would reach significance under NEPA.

CONDITIONS – MITIGATION, MONITORING AND REPORTING

While NMFS does not authorize GSOE's survey activities, NMFS does authorize the incidental take of marine mammals under its jurisdiction in connection with these activities and prescribes, where applicable, the methods of taking and other means of effecting the least practicable impact on the species and stocks and their habitats. NMFS' issuance of this IHA for GSOE's survey activities is thus conditioned upon reporting requirements and the implementation of mitigation and monitoring designed to reduce impacts to marine mammals to the level of least practicable impact. These conditions are summarized below and are described in detail in the Final IHA under Mitigation and Monitoring.

Required mitigation measures include the following:

- Establishment of marine mammal exclusion zones within which marine mammals could otherwise be exposed to received sound levels associated with injury;
- Implementation of shutdown procedures during the activity when marine mammals are detected within or about to enter the marine mammal exclusion zones; and
- Implementation of ramp-up procedures when the G&G survey equipment is started to provide marine mammals with a warning and to allow marine mammals to vacate the area.

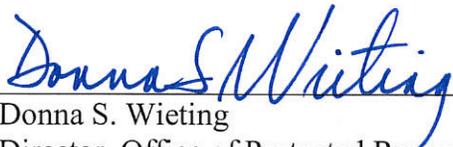
Required monitoring and reporting measures include the following:

- NMFS-approved protected species observers (PSOs) will document the number and species of marine mammals exposed to sounds from the survey equipment, as well as the behavior and responses of marine mammals to project-related activities;
- Passive acoustic monitoring will be used to improve detection, identification, and localization of cetaceans and to alert visual observers when vocalizing cetaceans are detected;
- Monitoring results will be used to assess the effectiveness of mitigation measures to minimize disturbance of marine mammals during project-related activities;
- A report must be submitted to NMFS within 90 calendar days of completion of acoustic measurements and marine mammal monitoring.

IV. DETERMINATION

Based on the information presented herein along with the application and analysis in the Final EA, it is hereby determined the issuance of the IHA to GSOE for marine site characterization activities will not significantly impact the quality of the human environment. In addition, we

have addressed all beneficial and adverse impacts of the action to reach the conclusion of no significant impacts. Accordingly, the preparation of an Environmental Impact Statement for this action is not necessary.



Donna S. Wieting
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MAY 15 2018

Date