



JUN 27 2012

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act (NEPA), an environmental review has been performed on the following action.

TITLE: Environmental Assessment on the Issuance of an Incidental Harassment Authorization to Fishermen's Atlantic City Windfarm, LLC to Take Marine Mammals by Harassment Incidental to Pile Driving off New Jersey

LOCATION: New Jersey state waters

SUMMARY: NMFS proposes to issue an Incidental Harassment Authorization (IHA) to Fishermen's Atlantic City Windfarm, LLC to allow the take, by Level B harassment, of three marine mammal species, incidental to pile driving activities. Elevated sound levels may result in short-term harassment of marine mammals, including avoidance and behavioral changes.

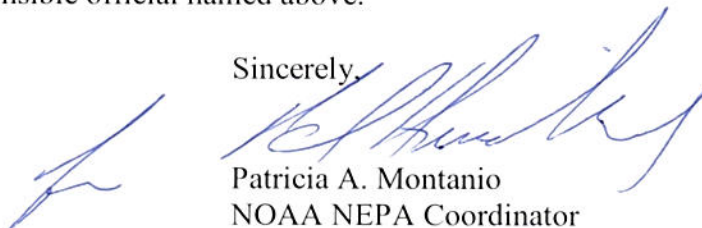
RESPONSIBLE
OFFICIAL:

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The environmental review process, including preparation of the Environmental Assessment (EA), led us to conclude that this action will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the finding of no significant impact (FONSI), including the supporting EA, is enclosed for your information.

Although NOAA is not soliciting comments on this completed EA/FONSI we will consider any comments submitted that would assist us in preparing future NEPA documents. Please submit any written comments to the responsible official named above.

Sincerely,



Patricia A. Montanio
NOAA NEPA Coordinator

Enclosure

ENVIRONMENTAL ASSESSMENT

Issuance of an Incidental Harassment Authorization to Fishermen's Atlantic City Windfarm, LLC to Take Marine Mammals by Harassment Incidental to Pile Driving off New Jersey

June 2012



LEAD AGENCY: USDOC, National Oceanic and Atmospheric Administration
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LOCATION: Atlantic City, New Jersey

ABSTRACT: The National Marine Fisheries Service (NMFS) proposes to issue an Incidental Harassment Authorization to Fishermen's Atlantic City Windfarm, LLC (Fishermen's) for the taking, by Level B harassment, of small numbers of marine mammals, incidental to pile driving in New Jersey state waters.

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LIST OF ACRONYMS, ABBREVIATIONS, AND INITIALISMS

BiOp	Biological Opinion
CFR	Code of Federal Regulations
CEQ	President’s Council on Environmental Quality
DOE	U.S. Department of Energy
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act

Fishermen’s	Fishermen’s Atlantic City Windfarm, LLC
ft	feet
IHA	Incidental Harassment Authorization
km	kilometer
m	meter
mi	mile
MMPA	Marine Mammal Protection Act
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
NAO	NOAA Administrative Order
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanographic and Atmospheric Administration
OMB	Office of Management Budget
PSO	Protected Species Observer
U.S.C.	United States Code

1. CHAPTER 1 – PURPOSE AND NEED FOR ACTION

1.1 DESCRIPTION OF PROPOSED ACTION

The National Marine Fisheries Service (NMFS) has received an application from Fishermen’s Atlantic City Windfarm, LLC (Fishermen’s) for an Incidental Harassment Authorization (IHA) to take marine mammals, by harassment, incidental to pile driving in New Jersey state waters. Fishermen’s construction activities, which have the potential to behaviorally disturb marine mammals, warrant an incidental take authorization from NMFS under section 101(a)(5)(D) of the Marine Mammal Protection Act of 1972, as amended (MMPA; 16 U.S.C. 1631 *et seq.*).

The proposed action considered in this Environmental Assessment (EA) is NMFS' issuance of a 1-year IHA under section 101(a)(5)(D) of the MMPA, for the taking, by Level B harassment only, of small numbers of marine mammals incidental to pile driving off New Jersey.

This EA, titled "*Issuance of an Incidental Harassment Authorization to Fishermen's Atlantic City Windfarm, LLC to Take Marine Mammals by Harassment Incidental to Pile Driving off New Jersey*" (hereinafter, EA), addresses the impacts on the human environment that would result from issuance of this IHA for MMPA Level B takes of marine mammals during pile driving, taking into account the mitigation measures required in the IHA.

1.1.1 MMPA PURPOSE AND NEED

The MMPA and Endangered Species Act of 1973 (ESA; 16 U.S.C. 1531 *et seq.*) prohibit "takes" of marine mammals and of threatened and endangered species, respectively, with only a few specific exceptions. The applicable exceptions in this case are an exemption for incidental take of marine mammals in section 101(a)(5)(D) of the MMPA and 7(a)(4) of the ESA.

Section 101(a)(5)(D) of the MMPA directs the Secretary of Commerce to authorize, upon request, the incidental, but not intentional, taking of small numbers of marine mammals, by United States citizens who engage in a specified activity (other than commercial fishing) within a specified geographical region if certain findings are made and a notice of a proposed authorization is provided to the public for review. Section 101(a)(5)(D) of the MMPA also establishes a 45-day time limit for NMFS' review of an application for an IHA followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of small numbers of marine mammals. Within 45 days of the close of the public comment period, NMFS must either issue or deny the IHA.

Purpose: The primary purpose of NMFS issuing an IHA to Fishermen's is to provide an exemption from the take prohibitions contained in the MMPA for the take of marine mammals incidental to Fishermen's pile driving.

Need: As noted above, the MMPA establishes a general moratorium or prohibition on the take of marine mammals, including take by behavioral harassment. The MMPA establishes a process by which individuals engaged in specified activities within a specified geographic area may request an IHA. Specifically, NMFS shall grant the IHA if it 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 subsistence uses (where relevant). The IHA must, where applicable, 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 mitigation, monitoring, and reporting of such takings.

Fishermen's has submitted a complete application demonstrating potential eligibility for issuance of an IHA. NMFS now has a corresponding duty to determine whether and how it can fashion an IHA authorizing take by harassment incidental to the activities described in the application. The need for this action is, therefore, established and framed by the MMPA and NMFS' responsibilities under section 101(a)(5)(D) of that Act, its implementing

regulations, and other applicable requirements which will influence its decision making, such as section 7 of the Endangered Species Act (ESA), which is discussed in more detail below this section.

The foregoing purpose and need guide NMFS in developing alternatives for consideration, including alternative means of mitigating potential adverse effects.

1.2 NEPA REQUIREMENTS AND SCOPE OF NEPA ANALYSIS

This EA focuses primarily on the environmental effects of authorizing MMPA Level B incidental takes of marine mammals during pile driving off New Jersey. The MMPA and its implementing regulations governing issuance of an IHA require that upon receipt of a valid and complete application for an IHA, NMFS must publish a notice of proposed IHA in the *Federal Register* within 45 days. The notice for Fishermen's proposed action summarized the purpose of the requested IHA, included a statement that NMFS would prepare an EA for the proposed action, and invited interested parties to submit written comments concerning the application and NMFS' preliminary analyses and findings including those relevant for consideration in the EA.

NOAA Administrative Order 216-6 (NAO 216-6) established agency procedures for complying with the National Environmental Policy Act (NEPA) and the implementing regulations issued by the President's Council on Environmental Quality (CEQ). Consistent with the intent of NEPA and the clear direction in NAO 216-6 to involve the public in NEPA decision-making, NMFS requested comments on the potential environmental impacts described in Fishermen's application and the proposed IHA. Comments received on the proposed IHA were considered during preparation of this EA.

NMFS has prepared this EA to assist in determining whether the direct, indirect, and cumulative impacts related to its issuance of the authorization for incidental take under the MMPA of three marine mammal species are likely to result in significant impacts to the human environment, or whether the analysis contained herein, including documents referenced and incorporated by reference and public comments received on the proposed IHA, supports the issuance of a Finding of No Significant Impact. Given the limited scope of the decision for which NMFS is responsible (i.e., whether or not to issue the authorization including prescribed means of take, mitigation measures, and monitoring requirements) and that this EA is intended to inform, the scope of analysis is limited to evaluating and disclosing the impacts to living marine resources and their habitat likely to be affected by issuance of an IHA authorizing the take of marine mammals incidental to Fishermen's pile driving activities. As described more fully below, the EA identifies all marine mammals that are likely to occur within the action area.

The analysis focuses on the impacts to certain marine mammal species that could potentially result from issuance of the IHA for the take of marine mammals incidental to the proposed pile driving off New Jersey; impacts that would result from the alternatives presented; and the consideration of potential cumulative environmental impacts. Impacts to other marine species and habitat located in the action area were considered unlikely, and thus received less detailed evaluation. The U.S. Army Corps of Engineers is preparing a separate EA to analyze impacts of their proposed project. NMFS provides a summary of those expected impacts in this document.

1.2.1 NEPA Scoping Summary

The purpose of scoping is to identify the issues to be addressed and any potentially significant environmental issues related to the proposed action, as well as identify and eliminate from detailed study the environmental issues that are not significant or that have been covered by review in prior NEPA analyses. An additional purpose of the scoping process is to identify the concerns of the affected public and federal agencies, states, and Indian tribes.

Under 50 CFR 216.104(b) of NMFS' implementing regulations for the MMPA, NMFS must, after deeming the application adequate and complete, publish in the *Federal Register* a notice of proposed IHA or receipt of a request for the implementation or re-implementation of regulations governing the incidental taking. Information gathered during the associated comment period is considered by NMFS in ensuring adequacy of preliminary determinations and proposed mitigation measures for IHAs. A notice of proposed IHA was published in the *Federal Register* on March 13, 2012 (77 FR 14736) and was made available for public review and comment for 30 days. Comments received on the proposed IHA were used to develop the scope of this EA.

1.2.2 PUBLIC INVOLVEMENT

During the public comment period for the notice of proposed IHA, NMFS only received comments from the Marine Mammal Commission. NMFS fully considered all comments, particularly those related to mitigation and monitoring, and developed responses that will appear in the *Federal Register* notice announcing final determination on the proposed IHA. NMFS does not repeat those responses here. Based on those comments, NMFS re-evaluated the mitigation and monitoring proposed for incorporation in the IHA. NMFS determined, based on the best available data, that the proposed measures are presently the most feasible and effective measures capable of implementation by Fishermen's during pile driving activities.

1.3 APPLICABLE LAWS AND NECESSARY FEDERAL PERMITS

This section summarizes federal, state, and local permits, licenses, approvals, and consultation requirements necessary to implement the proposed action.

1.3.1 THE NATIONAL ENVIRONMENTAL POLICY ACT

NEPA's EIS requirement is applicable to all "major" federal actions significantly affecting the quality of the human environment. Federal actions include activities that are fully or partially funded, regulated, conducted, or approved by a federal agency. NMFS' issuance of an IHA for incidental harassment of marine mammals represents approval and regulation of takes of marine mammals incidental to the applicant's activities and is a federal action for which environmental review is required. While NEPA does not dictate a substantive outcome for an IHA, it requires consideration of environmental issues in federal agency planning and decision making, and requires an analysis of alternatives and direct, indirect, and cumulative environmental effects of the NMFS proposed action to authorize MMPA Level B incidental take. As noted, NMFS has prepared this EA to assist in determining whether an EIS is necessary for the action.

1.3.2 THE ENDANGERED SPECIES ACT

Section 7 of the ESA requires consultation with the appropriate federal agency (either NMFS or the U.S. Fish and Wildlife Service) for federal actions that “may affect” a listed species or critical habitat. NMFS’ issuance of an IHA affecting ESA-listed species or designated critical habitat, directly or indirectly, is a federal action subject to these section 7 consultation requirements. Accordingly, NMFS is required to ensure that its action is not likely to jeopardize the continued existence of any threatened or endangered species or result in destruction or adverse modification of critical habitat for such species. Regulations specify the requirements for these consultations (50 CFR § 402).

NMFS has determined that issuance of the IHA would not affect ESA-listed marine mammals. Therefore, section 7 consultation is not required for issuance of an IHA.

1.3.3 THE MARINE MAMMAL PROTECTION ACT

Section 101(a)(5)(D) of the MMPA directs the Secretary of Commerce to authorize, upon request, the incidental, but not intentional, taking by harassment of small numbers of marine mammals of a species or population stock, for periods of not more than one year, by U.S. citizens who engage in a specified activity (other than commercial fishing) within a specific geographic region if certain findings are made and a *Federal Register* notice of a proposed authorization is provided to the public for review.

Section 101(a)(5)(D) of the MMPA established an expedited process by which U.S. citizens can apply for an authorization to incidentally take small numbers of marine mammals by harassment. Except with respect to certain activities not pertinent here, 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”].

Section 101(a)(5)(D) of the MMPA establishes a 45-day time limit for NMFS’ review of an application followed by a 30-day public notice and comment period on any proposed authorizations for the incidental harassment of small numbers of marine mammals. Not later than 45 days after the close of the public comment period, if the Secretary of Commerce makes the findings set forth in section 101(a)(5)(D)(i) of the MMPA, the Secretary of Commerce shall issue the authorization with appropriate conditions to meet the requirements of section 101(a)(5)(D)(ii) of the MMPA.

NMFS has promulgated regulations to implement the permit provisions of the MMPA (50 CFR Part 216) and has produced Office of Management and Budget (OMB)-approved application instructions (OMB Number 0648-0151) that prescribe the procedures necessary to apply for permits. All applicants must comply with these regulations and application instructions in addition to the provisions of the MMPA. Applications for an IHA must be submitted according to regulations at 50 CFR § 216.104.

1.3.4 MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), Congress defined Essential Fish Habitat (EFH) as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity” (16 U.S.C. 1802(10)). The EFH provisions of the Magnuson-Stevens Act offer resource managers means to accomplish the goal of giving heightened consideration to fish habitat in resource management. NMFS Office of Protected Resources is required to consult with NMFS Office of Habitat Conservation for any action it authorizes (e.g., incidental take), funds, or undertakes, or proposes to authorize, fund, or undertake that may adversely affect EFH. This includes renewals, reviews, or substantial revisions of actions.

There are 26 fish species with designated EFH or commercial importance within Fishermen’s proposed action area. As the federal action agency for permitting Fishermen’s construction, the Army Corps of Engineers will consult with NMFS Northeast Region on EFH. The mitigation and monitoring measures that would be required by NMFS’ IHA for this action would not result in adverse effects to EFH.

2. CHAPTER 2 – ALTERNATIVES INCLUDING THE PROPOSED ACTION

The NEPA implementing regulations (40 CFR § 1502.14) and NAO 216-6 provide guidance on the consideration of alternatives to a federal proposed action and require rigorous exploration and objective evaluation of all reasonable alternatives. Each alternative must be feasible and reasonable in accordance with the implementing regulations (40 CFR §§ 1500-1508). This chapter describes the range of potential actions (alternatives) determined reasonable with respect to achieving the stated purpose and need, as well as alternatives eliminated from detailed study and also summarizes the expected outputs and any related mitigation for each alternative.

This EA evaluates alternatives that would fulfill NMFS’ purpose and need, namely: (1) the issuance of an IHA for the take of marine mammals by Level B behavioral harassment, incidental to Fishermen’s pile driving activities in New Jersey state waters; and (2) compliance with the MMPA which sets forth specific standards (i.e., no unmitigable adverse impact on subsistence, negligible impact, and providing means of effecting the least practicable adverse impact) that must be met in order for NMFS to issue an IHA.

NMFS' proposed action (preferred) alternative represents the activities proposed by the applicant for the IHA, along with required monitoring and mitigation measures that would minimize potential adverse environmental impacts.

2.1 PROJECT OBJECTIVES

The fundamental objective of the project is to construct jacketed foundations to support six electric generating windmills. This is the first phase of ultimately constructing a 20 megawatt offshore wind farm that would generate and deliver electricity to an onshore location.

2.2 ALTERNATIVE 1 – NO ACTION ALTERNATIVE

Under the No Action Alternative, NMFS would not issue an IHA to Fishermen's for the taking, by Level B harassment, of small numbers of marine mammals, incidental to pile driving activities. The MMPA prohibits all takings of marine mammals unless authorized by a permit or exemption under the MMPA. The consequences of not authorizing incidental take are (1) the entity conducting the activity may be in violation of the MMPA if take occurs, (2) mitigation and monitoring measures cannot be required by NMFS, (3) mitigation measures may or may not be performed voluntarily by the applicant, and (4) the applicant may choose not to conduct the activity.

By undertaking measures to further protect marine mammals from incidental take through the authorization program, the impacts of these activities on the marine environment can potentially be reduced. While NMFS does not authorize the pile driving itself, NMFS does authorize the incidental harassment of marine mammals incidental to this activity and prescribes the methods of taking and other means of effecting the least practicable adverse impact on the species and stocks and their habitats. If an IHA was not issued, Fishermen's could decide either to cancel pile driving or to continue the proposed activity. If the latter decision was made, Fishermen's could independently implement mitigation and monitoring measures, which potentially would result in the same environmental impacts as the preferred alternative; however, Fishermen's would be proceeding without authorization from NMFS pursuant to the MMPA. If Fishermen's did not implement mitigation measures during pile driving activities, increased takes of marine mammals by harassment (and potentially by injury or mortality) could occur if the activities were conducted when marine mammals were present. Although the No Action Alternative would not meet the purpose and need to allow incidental takings of marine mammals under certain conditions, CEQ regulations require consideration and analysis of a No Action Alternative for the purposes of presenting a comparative analysis to the action alternatives.

2.3 ALTERNATIVE 2 – PROPOSED ACTION (PREFERRED)

The Proposed Action is the Preferred Alternative. Under this alternative, NMFS would issue an IHA to Fishermen's allowing the take, by Level B harassment, of three marine mammal species, incidental to pile driving with the mitigation, monitoring, and reporting conditions contained within Fishermen's IHA application and NMFS' proposed IHA *Federal Register* notice. Accordingly, the Proposed Action would satisfy the purpose and need of the NMFS MMPA action – issuance of an IHA, along with required mitigation and monitoring measures – and would enable Fishermen's to comply with the MMPA.

2.3.1 PILE DRIVING OPERATIONS

NMFS' proposed IHA *Federal Register* notice (77 FR 14736, March 13, 2012) describes the pile driving protocols in detail and this EA briefly summarizes them here. Installation of 18 steel pipe piles would take place about 4.5 km offshore. Installation would require a maximum of 24 days during May and June.

2.3.2 MITIGATION AND MONITORING MEASURES

The NMFS' proposed IHA *Federal Register* notice (77 FR 14736, March 13, 2012) describes the required mitigation and monitoring measures in detail and this EA briefly summarizes them here. To reduce the potential for disturbance from acoustic stimuli associated with the activities, the following mitigation and monitoring measures would be in place for marine mammals: (1) establishment of an exclusion zone; (2) pile driving shut down and delay procedures; (3) soft-start procedures; (4) visual monitoring; and (5) hydroacoustic monitoring.

Exclusion Zones: NMFS has determined that for acoustic effects, using acoustic thresholds in combination with corresponding exclusion zones is an effective way to consistently apply measures to avoid or minimize the impacts of an action. During all in-water impact pile driving, Fishermen's would establish a radius around each pile driving site to be continuously monitored for marine mammals. If a marine mammal is observed nearing or entering this perimeter, Fishermen's would reduce hammering power (or stop hammering) to reduce the sound pressure levels. More specifically, Fishermen's would establish a preliminary 1,000-m exclusion zone around each pile driving site, based on the estimated rates of sound attenuation discussed earlier in this notice. This distance would encompass the estimated 180-dB isopleth, within which injury could occur, plus an additional 893-m buffer. Once hydroacoustic monitoring is conducted, the exclusion zone may be adjusted accordingly, with input from NMFS, so that marine mammals are not exposed to Level A harassment sound pressure levels.

Shut Down and Delay Procedures: If a protected species observer (PSO) sees a marine mammal within or approaching the exclusion zone prior to start of impact pile driving, the protected species observer would notify the construction manager (or other authorized individual) who would then be required to delay pile driving until the marine mammal leaves the exclusion zone or if the animal has not been resighted within 15/30 minutes (pinnipeds/cetaceans). If a marine mammal is sighted within or approaching the exclusion zone during pile driving, pile driving would be reduced to 50 percent capacity, which would reduce the size of the Level A and Level B harassment zones. If an animal approaches or enters the new Level A zone, then pile driving operations would be stopped until the animal has left the exclusion zone or 15/30 minutes (pinnipeds/cetaceans) have passed since the last sighting.

Soft-start Procedures: Fishermen's would implement a "soft-start" technique at the beginning of each pile installation to allow marine mammals to leave the immediate area before sound sources reach full energy. Soft-start procedures would be conducted prior to driving each pile if hammering ceases for more than 15/30 minutes (pinnipeds/cetaceans).

Visual Monitoring: Fishermen’s would have at least two PSOs monitoring the 1,000-m exclusion zone 30 minutes before, during, and 30 minutes after all pile driving.

Hydroacoustic Monitoring: Fishermen’s would take sound measurements during the pile driving of the first three jacket foundations. Fishermen’s would establish one reference location at a distance of 100 m from the sound source. They would take sound measurements from the reference location at two depths (one near the middle of the water column and one near the bottom of the water column). Two additional in-water measurements would be taken in two different directions of the pile driving site. Sound measurements would also be recorded 10 m from the sound source, as necessary, to determine the source level and affirm the distances to the Level B and Level A harassment zones. Fishermen’s would integrate 90 percent of the energy window from each blow into their sound analysis when computing RMS sound pressure levels.

2.4 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED STUDY

NMFS considered whether other alternatives could meet the purpose and need and support Fishermen’s proposed activity. An alternative that would allow for the issuance of an IHA with no required mitigation or monitoring was considered but eliminated from consideration, as it would not be in compliance with the MMPA and therefore would not meet the purpose and need. For that reason, this alternative is not analyzed further in this document.

3. CHAPTER 3 – AFFECTED ENVIRONMENT

A summary of the physical and biological environment of the project area was included in Fishermen’s IHA application and NMFS’ notice of proposed IHA (AMEC, 2011; 77 FR 14736, March 13, 2012). In addition to the marine mammal stocks and species that are the subject of the IHA, a number of sea birds, sea turtles, fish, and invertebrates may be found in the action area. The project area is located about 4.5 km offshore from Atlantic City, New Jersey and consists of about 170 acres – calculated as the perimeter around the six turbines plus a five-ft width along the centerline of the cable route. However, the portion of the area that will be covered by turbine foundations is less than 5 acres.

3.1 PHYSICAL ENVIRONMENT

3.1.1. Bathymetry and Oceanography

Pile driving activities would take place within a 4.3 acre area offshore from Atlantic City. Sediment data collected during the benthic survey in November 2010 indicates that the seafloor consists mainly of fine-medium grain sand. Water depth at the proposed project location is about 8 to 12 m at mean lower low water.

3.2 BIOLOGICAL ENVIRONMENT

This nearshore area of the Atlantic Ocean is a habitat for numerous coastal and marine species, including birds, fish, and marine mammals, that are protected by a variety of environmental regulations. NMFS' limited action of issuing an IHA would allow for the harassment of marine mammals incidental to pile driving and, therefore, is the focus of this section.

However, other impacts that will be addressed in the U.S. Army Corps of Engineer's EA include: the impact to existing bottom sediment from the installation of rip rap; and the impact of the water jet cutting apparatus (increased turbidity) from cable installation. These impacts are not expected to be significant and the increased turbidity would be temporary.

3.2.1 MARINE MAMMALS

There are 42 marine mammal species with confirmed or potential occurrence off the coast of New Jersey. Of these, 20 species are regular inhabitants to the northeast Atlantic Ocean and could occur in the proposed project area at some point during the year. Information on these species was provided in the proposed IHA notice (77 FR 14736, March 13, 2012). However, only bottlenose dolphins (*Tursiops truncatus*), harbor porpoises (*Phocoena phocoena*), and harbor seals (*Phoca vitulina*) are considered likely to occur in the action area during May and June.

3.2.2 SEABIRDS

More than 150 bird species were recorded during the New Jersey Department of Environmental Protection's Wind Ocean Ecological Baseline Surveys project. The project's final report summarizes the survey results with detailed information on bird species and distribution (Geo-Marine, Inc., 2010).

3.2.3 MARINE TURTLES

During the New Jersey Department of Environmental Protection's ecological baseline study, leatherback turtles (*Dermochelys coriacea*) and loggerhead turtles (*Caretta caretta*) were observed along the 13,123-km trackline. However, most of the sea turtle sightings took place farther offshore than the proposed pile driving activities and no sea turtles were observed within the area potentially impacted by pile driving noise.

3.2.4 FISH

There are numerous fish species inhabiting this portion of the Atlantic Ocean. Twenty-six species of fish have designated EFH during at least one life stage within Fishermen's larger proposed project area: Atlantic cod (*Gadus morhua*); Atlantic butterfish (*Peprilus triacanthus*); Atlantic sea herring (*Clupea harengus*); black sea bass (*Centropristus striata*); bluefin tuna (*Thunnus thynnus*); bluefish (*Pomatomus salatrix*); clearnose skate (*Raja eglanteria*); cobia (*Rachycentron conadum*); dusky shark (*Charcharinus obscures*); king mackerel (*Scomberomorus cavalla*); little skate (*Raja erinacea*); monkfish (*Lophius americanus*); red hake (*Urophycis chuss*); sandbar shark (*Charcharinus plumbeus*); scup (*Stenotomus chrysops*); shortfin mako shark (*Isurus oxyrhyncus*); Spanish mackerel

(*Scomberomorus maculatus*); spiny dogfish (*Squalus acanthias*); summer flounder (*Paralichthys dentatus*); surf clam (*Spisula solidissima*); tiger shark (*Galeocerdo cuvieri*); windowpane flounder (*Scopthalmus aquosus*); winter flounder (*Pseudopleuronectes americanus*); winter skate (*Leucoraja ocellata*); witch flounder (*Glyptocephalus cynoglossus*); and yellowtail flounder (*Limanda ferruginea*). Detailed information on each EFH species is provided in the applicant's EFH assessment (Normandeau Associates, Inc., 2011).

3.2.5 INVERTEBRATES

Numerous invertebrate species exist in this portion of the western North Atlantic. One of the most prominent and commercially important is the surf clam (*Spisula solidissima*). The Atlantic surf clam is the largest bivalve mollusk in the western North Atlantic and inhabits sandy continental shelf areas from the Gulf of St. Lawrence to Cape Hatteras. Around New Jersey, the highest concentrations of surf clams occur at depths less than 18 m. More detailed information on surf clams and the presence of invertebrates in the proposed action area is provided in the applicant's EFH assessment (Normandeau Associates, Inc., 2011).

4. CHAPTER 4 – ENVIRONMENTAL CONSEQUENCES

NMFS has evaluated the potential impacts of Fishermen's action in order to determine whether to authorize incidental take of marine mammals under the MMPA. NMFS' evaluation indicates that any direct or indirect effects of the action would not result in a substantial impact to living marine resources or their habitats and would not have any adverse impacts on biodiversity or ecosystem function. Effects of the proposed action are considered to be short-term, temporary in nature, and negligible, and unlikely to affect normal ecosystem function or predator/prey relationships; therefore, there would not be a substantial impact on marine life biodiversity or on the normal function of the near shore marine environment. NMFS has determined that appropriate mitigation measures would be in place to minimize impacts to marine mammals and other marine species.

Fishermen's proposes to conduct pile driving during daylight hours for a maximum of 24 days. During pile driving, any displacement of fish species in the proposed action would be temporary. Many fish species that do not have swim bladders (such as bottom-dwelling species, including flatfish) tend to have relatively poor auditory sensitivity and are not likely to be affected by exposure to intense noise. Pile driving may potentially displace prey items of marine mammals, such as fish. However, prey items would return after pile driving ends and the ambient sound has returned to baseline levels.

The impacts of pile driving on marine mammals are specifically related to acoustic activities, and these are expected to be temporary in nature, negligible in intensity, and would not result in substantial impacts to marine mammals or to their role in the ecosystem. NMFS anticipates, and would authorize, the incidental Level B harassment only of small numbers of marine mammals, in the form of temporary behavioral disturbance. NMFS does not anticipate that take by injury (Level A harassment), serious injury, or mortality would occur and expects that harassment takes would be at the lowest level practicable due to the incorporation of the mitigation measures required by the proposed IHA and analyzed in this EA. Level B harassment is not expected to affect biodiversity or ecosystem function.

4.1 EFFECTS OF ALTERNATIVE 1 – NO ACTION ALTERNATIVE

Under the No Action Alternative, NMFS would not issue an IHA to Fishermen's for the proposed pile driving activities. In this case, Fishermen's would decide whether or not to continue with pile driving. If Fishermen's chose not to conduct the activity, then there would be no effects to marine mammals. Conducting the activity without an MMPA authorization (i.e., an IHA) could result in a violation of federal law.

If Fishermen's decided to conduct some or all of the activity without implementing any mitigation measures, and if activities occur when marine mammals are present in the action area, there is the potential for unauthorized harassment of marine mammals. The sounds produced by pile driving would have the potential to cause behavioral harassment of marine mammals in the action area, while some marine mammals may avoid the area altogether. Additionally, masking of natural sounds may occur. Auditory impacts (i.e., temporary and permanent threshold shifts) could also occur if no mitigation or monitoring measures are implemented. Monitoring of exclusion zones for the presence of marine mammals allows for the implementation of mitigation measures, such as shutdowns and delays when marine mammals occur within these zones. These measures are required to prevent the onset of shifts in hearing thresholds. However, if a marine mammal occurs within these high energy ensonified zones, it is possible that hearing impairments to marine mammals could occur. Additionally, although unlikely, based on an animal's proximity to the sound source, permanent threshold shift (PTS) could also occur, but this possibility is thought to be unlikely. If Fishermen's decided to implement mitigation measures similar to those described in the proposed IHA, then the impacts would most likely be similar to those described for Alternative 2 below.

4.2 EFFECTS OF ALTERNATIVE 2 – PREFERRED ALTERNATIVE

The IHA *Federal Register* notice, incorporated by reference (77 FR 14736, March 13, 2012), describes in detail the potential effects of pile driving on marine mammals. In summary, NMFS expects any impacts from elevated sound levels to be temporary, behavioral harassment (such as avoidance or alteration or behavior).

Fishermen's proposed a number of monitoring and mitigation measures for marine mammals, which were included in the proposed IHA *Federal Register* notice (77 FR 14736, March 13, 2012). In analyzing the effects of the preferred alternative, NMFS has considered the following monitoring and mitigation measures as part of the preferred alternative:

- (1) proposed exclusion zone;
- (2) pile driving shut-down and delay procedures;
- (3) soft-start procedures;
- (4) visual monitoring by PSOs; and
- (5) hydroacoustic monitoring.

Inclusion of these monitoring and mitigation measures is anticipated to minimize and/or avoid impacts to marine resources. With the above planned monitoring and mitigation measures, any unavoidable impacts to a marine mammal encountered are expected to be limited to short-term, localized changes in behavior (such as brief masking of natural sounds) and short-term changes in animal distribution near the pile hammer. At worst, effects on marine mammals may be interpreted as falling within the MMPA definition of “Level B behavioral harassment.” Under the proposed action, NMFS expects no long-term or substantial adverse effects on marine mammals, the populations to which they belong, or on their habitats.

NMFS does not anticipate that take by injury (Level A harassment), serious injury, or mortality would occur and expects that harassment takes would be at the lowest level practicable due to the incorporation of the mitigation measures proposed in the application and NMFS’ notice of proposed IHA (77 FR 14736, March 13, 2012), nor is take by injury, serious injury, or mortality authorized by the proposed IHA.

4.2.1 COMPLIANCE WITH NECESSARY LAWS – NECESSARY FEDERAL PERMITS

NMFS has determined that the IHA is consistent with the applicable requirements of the MMPA, ESA, and NMFS’ implementing regulations. The applicant has secured or applied for necessary permits from NMFS. The applicant is responsible for complying with all other applicable laws and regulations.

4.2.2 UNAVOIDABLE ADVERSE IMPACTS

A summary of unavoidable adverse impacts to marine mammals occurring in the proposed action area and their habitats was included in NMFS’ notice of proposed IHA (77 FR 2071, January 19, 2012).

NMFS does not expect Fishermen’s activities to have adverse consequences on the viability of marine mammals in the proposed project area. Further, NMFS does not expect any changes to annual rates of recruitment or survival of marine mammals exposed to elevated sound levels. Numbers of individuals of all species taken by harassment are expected to be small (relative to species or stock abundance), and pile driving activities would have a negligible impact on the affected species or stocks of marine mammals. The MMPA requirement of ensuring the proposed action has no unmitigable adverse impact to subsistence uses does not apply here because of the location of the proposed activity.

4.3 CUMULATIVE EFFECTS

Cumulative effects are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable

future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR§1508.7). Cumulative impacts may occur when there is a relationship between a proposed action and other actions expected to occur in a similar location or during a similar time period, or when past or future actions may result in impacts that would additively or synergistically affect a resource of concern. These relationships may or may not be obvious. Actions overlapping within close proximity to the proposed action can reasonably be expected to have more potential for cumulative effects on “shared resources” than actions that may be geographically separated. Similarly, actions that coincide temporally will tend to offer a higher potential for cumulative effects.

Actions that might permanently remove a resource would be expected to have a potential to act additively or synergistically if they affected the same population, even if the effects were separated geographically or temporally. Note that the proposed action considered here would not be expected to result in the removal of individual cetaceans or pinnipeds from the population or to result in harassment levels that might cause animals to permanently abandon preferred feeding areas or other habitat locations, so concerns related to removal of viable members of the populations are not implicated by the proposed action. This cumulative effects analysis considers these potential impacts, but more appropriately focuses on those activities that may temporally or geographically overlap with the proposed activity such that repeat harassment effects warrant consideration for potential cumulative impacts to the affected four marine mammal species and their habitats.

Human activities in the region of the proposed pile driving include extensive commercial fishing, marine resource harvesting, aquaculture, and vessel traffic. As described in Richardson *et al.* (1995), marine mammals are likely habituated and tolerant to a certain degree of anthropogenic disturbance, including noise. Fishermen’s proposed action is not likely to add an increment of disturbance that would cumulatively, when combined with other actions, result in significant adverse impacts to marine mammals. In addition to the activities listed above, future environmental effects may result from Fishermen’s proposed offshore wind project. Fishermen’s plans to construct and operate a 20 megawatt offshore wind farm at the location of the pile driving activities. Fishermen’s proposed pile driving activities would not overlap with future construction or operation of the turbine units. The environmental effects of Fishermen’s long-term project will be analyzed in a separate NEPA document. Any future authorizations would have to undergo the same permitting process and would take Fishermen’s pile driving activities into consideration when addressing cumulative effects.

NMFS’ proposed action of issuing an IHA for the incidental take of marine mammals by Level B harassment in New Jersey state waters is only expected to result in minimal impacts to marine species in the area. This limited action and any temporary, behavioral effects that may result from Fishermen’s proposed action, are not expected to contribute substantially to other cumulative impacts from activities offshore New Jersey.

4.4 CONCLUSION

The inclusion of the mitigation and monitoring requirements in the IHA, as described in the Preferred Alternative, would ensure that Fishermen’s activity and the proposed mitigation measures under Alternative 2 (Preferred Alternative) are sufficient to minimize any potential adverse impacts to the human environment, particularly marine mammal species or stocks and

their habitat. With the inclusion of the required mitigation and monitoring requirements, NMFS has determined that the proposed pile driving activities, and NMFS' proposed issuance of an IHA to Fishermen's, would result at worst in a temporary modification of behavior (Level B harassment) of some individuals of three species of marine mammals. In addition, no take by injury, serious injury, and/or mortality is anticipated, and the potential for temporary or permanent hearing impairment would be avoided through the incorporation of the mitigation and monitoring measures described earlier in this document.

5. LIST OF PREPARERS AND AGENCIES CONSULTED

Agencies Consulted

No other persons or agencies were consulted in preparation of this EA.

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6. REFERENCES

AMEC Environment & Infrastructure, Inc. (2012). Revised Request for an Incidental Harassment Authorization: 20 MW Offshore Wind Energy Project Offshore of Atlantic City, New Jersey. 84 pp.

Geo-Marine, Inc. (2010). New Jersey Department of Environmental Protection Baseline Studies Final Report. Volume II: Avian studies. 2,109 pp.

Normandeau Associates, Inc. (2011). Essential Fish Habitat Assessment for the Fishermen's Atlantic City Offshore Windfarm, LLC. 88 pp.

Richardson, W.J., et al. (1995). Marine mammals and noise. San Diego: Academic Press. 576 pp.

**FINDING OF NO SIGNIFICANT IMPACT
FOR THE ISSUANCE OF AN INCIDENTAL HARASSMENT AUTHORIZATION
TO FISHERMEN'S ATLANTIC CITY WINDFARM, LLC TO TAKE MARINE MAMMALS
BY HARASSMENT INCIDENTAL TO PILE DRIVING OFF NEW JERSEY**

NATIONAL MARINE FISHERIES SERVICE

BACKGROUND

The National Marine Fisheries Service (NMFS) received an application from AMEC Environment & Infrastructure, on behalf of Fishermen's Atlantic City Windfarm, LLC (Fishermen's), for an Incidental Harassment Authorization (IHA) to take marine mammals, by Level B harassment, incidental to pile driving in New Jersey state waters. Pursuant to the Marine Mammal Protection Act (MMPA; 16 U.S.C. 1631 *et seq.*), authorization for incidental taking shall be granted provided that NMFS: (1) determines that the action would have a negligible impact on the affected species or stocks of marine mammals; (2) finds the action would not have an unmitigable adverse impact on the availability of those species or stocks of marine mammals for taking for subsistence uses; and (3) sets forth the permissible methods of taking, other means of effecting the least practicable impact on affected species and stocks and their habitat, and requirements pertaining to the mitigation, monitoring, and reporting of such takes.

In accordance with the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*), NMFS completed an Environmental Assessment (EA) titled "*Issuance of an Incidental Harassment Authorization to Fishermen's Atlantic City Windfarm, LLC to Take Marine Mammals by Harassment Incidental to Pile Driving off New Jersey.*"

NMFS has prepared this Finding of No Significant Impact (FONSI) to evaluate the significance of the impacts of NMFS' action. It is specific to Alternative 2 in the EA, identified as the Preferred Alternative. Under this alternative, NMFS would issue an IHA with required mitigation, monitoring, and reporting measures. Based on NMFS' review of Fishermen's proposed activities and the measures contained in Alternative 2, NMFS has determined that no significant impacts to the human environment would occur from implementing the Preferred Alternative.

ANALYSIS

NAO 216-6 contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 CFR § 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below this section is relevant to making a FONSI and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQ's context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to cause substantial damage to the ocean

and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in Fishery Management Plans (FMP)?

Response: NMFS' limited action of issuing an IHA is not expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat. Fishermen's proposed action of pile driving may cause limited adverse impacts to fish and their habitats; however, these impacts are expected to be minimal and the long-term project of installing wind turbines may even provide additional fish habitat.

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCA) govern marine fisheries management in waters within the U.S. Exclusive Economic Zone, and require federal agencies to consult with NMFS with respect to actions that may adversely impact Essential Fish Habitat (EFH). As the federal action agency for Fishermen's construction activities, the U.S. Army Corps of Engineers will consult with NMFS Northeast Region on EFH. There are no independent adverse effects to EFH from issuance of the IHA.

2) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: NMFS does not expect either Fishermen's proposed action or NMFS' proposed action (i.e., issuing an IHA to Fishermen's that authorizes Level B harassment) to have a substantial impact on biodiversity or ecosystem function within the affected environment. The proposed action area may be used by marine mammals for opportunistic foraging during May and June but is not considered a primary foraging ground. Any impacts to prey species or marine mammal behavior would be temporary.

3) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: NMFS does not expect either Fishermen's proposed action or NMFS' proposed action (i.e., issuing an IHA to Fishermen's) to have a substantial adverse impact on public health or safety. The proposed pile driving activities would occur during daylight hours and constant monitoring for marine mammals and other marine life during operations effectively eliminates the possibility of any humans being inadvertently exposed to levels of sound that might have adverse effects. Although the conduct of pile driving activities may carry some risk to the personnel involved (e.g., mechanical accidents), the applicant and those individuals working with the applicant would be required to be adequately trained or supervised in performance of the underlying activity to minimize such risk to personnel.

4) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: The EA evaluates the affected environment and potential effects of NMFS' (i.e., issuing an IHA to Fishermen's) and Fishermen's (i.e. pile driving activities) actions, indicating that only the acoustic activities have the potential to affect marine mammals in a way that requires authorization under the MMPA. These temporary acoustic activities would not affect physical habitat features, such as substrates and water quality.

NMFS has determined that the proposed activity may result in some Level B harassment (in the form of short-term and localized changes in behavior) of small numbers, relative to the population sizes, of three species of marine mammals, none of which are listed under the Endangered Species Act (ESA; 16 U.S.C. 1531 *et seq.*). The U.S. Army Corps of Engineers will consult on EFH with NMFS' Northeast Region.

The following mitigation measures are planned for the proposed action to minimize adverse effects to protected species:

- (1) exclusion zones;
- (2) shut down and delay procedures;
- (3) soft-start procedures;
- (4) visual monitoring; and
- (5) hydroacoustic monitoring.

Taking these measures into consideration, responses of marine mammals from the preferred alternative are expected to be limited to temporary avoidance of the area around the sound source and short-term behavioral changes, falling within the MMPA definition of "Level B harassment."

NMFS does not anticipate that marine mammal take by injury (Level A harassment), serious injury, or mortality would occur and expects that harassment takes would be at the lowest level practicable due to the incorporation of the mitigation measures required by the IHA. Numbers of individuals of all marine mammal species taken by harassment are expected to be small (relative to species or stock abundance), and the take is anticipated to have a negligible impact on any species or stock. The impacts of the proposed action on marine mammals are specifically related to acoustic activities, and these are expected to be temporary in nature, negligible, and would not result in substantial impact to marine mammals or to their role in the ecosystem.

5) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: The primary impacts to the natural and physical environment are expected to be acoustic and temporary in nature (and not significant), and not interrelated with significant social or economic impacts. Issuance of the IHA would not result in inequitable distributions of environmental burdens or access to environmental goods.

NMFS has determined that issuance of the IHA would not adversely affect low-income or minority populations. Further, there would be no impact of the activity on the availability of the species or stocks of marine mammals for subsistence uses. Therefore, no significant social or economic effects are expected to result from issuance of the IHA or the proposed action.

6) Are the effects on the quality of the human environment likely to be highly controversial?

Response: The effects of this action on the quality of the human environment, that is, NMFS' issuance of an IHA for the take of marine mammals incidental to pile driving activities, are not highly controversial. Specifically, NMFS did not receive any comments raising substantial

questions or concerns about the size, nature, or effect of potential impacts from NMFS's proposed action or Fishermen's proposed project.

7) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas?

Response: Issuance of the IHA is not expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas as it would only authorize harassment to marine mammals. The action area does not contain, and is not adjacent to unique areas. While there may be adverse impacts to EFH, those impacts are likely to be minor, localized, and short-term (see responses to question 1).

8) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: The potential risks of pile driving are not unique or unknown, nor is there significant uncertainty about impacts. NMFS has issued numerous IHAs for pile driving activities and conducted NEPA analysis on those projects. Each of these projects required marine mammal monitoring and monitoring reports have been reviewed by NMFS to ensure that activities have a negligible impact on marine mammals. In no case have impacts to marine mammals, as determined from monitoring reports, exceeded NMFS' analysis under the MMPA and NEPA. Therefore, the effects on the human environment are not likely to be highly uncertain or involve unique or unknown risks.

9) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: Issuance of an IHA to Fishermen's is not related to other actions with individually insignificant, but cumulatively significant impacts. The environmental effects of Fishermen's long-term wind turbine project will be analyzed by the U.S. Army Corps of Engineers in a NEPA document. Although the development of a wind turbine project is new to this area, significant cumulative impacts to the natural environment are not anticipated. Any future authorizations would have to undergo the same permitting process and would take the Fishermen's project into consideration when addressing cumulative effects.

10) Is the proposed action likely 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?

Response: The proposed action would not take place in any areas listed in or eligible for listing in the National Register of Historic Places and would not cause loss or destruction of significant scientific, cultural, or historical resources, as none exist within the action area.

11) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: The proposed action cannot be reasonably expected to result in the introduction or spread of a non-indigenous species. The spread of non-indigenous species generally occurs through ballast water exchange or hull attachment. Support vessels used during construction would likely be small, local vessels that do not make trans-ocean trips.

12) Is the proposed action likely to establish a precedent for future actions with significant effects or does it represent a decision in principle about a future consideration?

Response: The proposed action would not set a precedent for future actions with significant effects or represent a decision in principle. Each MMPA authorization applied for under 101(a)(5) must contain information identified in NMFS' implementing regulations with no exceptions. NMFS considers each activity specified in an application separately and, if it issues an IHA to the applicant, NMFS must determine that the impacts from the specified activity would result in a negligible impact to the affected species or stocks.

NMFS has issued many authorizations for pile driving activities. A finding of no significant impact for this action, and for NMFS's issuance of an IHA, may inform the environmental review for future projects but would not establish a precedent or represent a decision in principle about a future consideration.

13) Can the proposed action reasonably be expected to threaten a violation of any Federal, State, or local law or requirements imposed for the protection of the environment?

Response: Issuance of the proposed IHA would not result in any violation of Federal, State, or local laws for environmental protection. The applicant consulted with the appropriate Federal, State, and local agencies during the application process and would be required to follow associated laws as a condition of the IHA.

14) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: The proposed action allows for the taking, by incidental harassment, of marine mammals during the proposed pile driving activities. NMFS has determined that marine mammals may exhibit behavioral changes such as avoidance of or changes in foraging patterns within the action area. However, NMFS does not expect the authorized harassment to result in significant cumulative adverse effects on the affected species or stocks. Pile driving activities and the issuance of an IHA are not expected to result in any significant cumulative adverse effects on target or non-target species incidentally taken by harassment due to pile driving activities.

Cumulative effects refer to the impacts on the environment that result from a combination of past, existing, and reasonably foreseeable human activities and natural processes. Human activities in the region of the proposed action include vessel traffic and commercial or recreational fishing. Because of the relatively small area of ensonification and mitigation measures, the action would not result in synergistic or cumulative adverse effects that could have a substantial effect on any species.

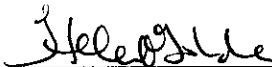
The proposed action does not target any marine species and is not expected to result in any individual, long-term, or cumulative adverse effects on the species incidentally taken by harassment due to these activities. The potential temporary behavioral disturbance of marine species might

result in short-term behavioral effects for these marine species within the ensonified zones, but no long-term displacement of marine mammals, endangered species, or their prey is expected as a result of the proposed action conducted under the requirements of the IHA. Therefore, NMFS does not expect any cumulative adverse effects on any species as a result of pile driving activities.

DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting EA titled "*Issuance of an Incidental Harassment Authorization to Fishermen's Atlantic City Windfarm, LLC to Take Marine Mammals by Harassment Incidental to Pile Driving off New Jersey,*" and documents that it references, NMFS has determined that issuance of an IHA to Fishermen's for the take, by Level B harassment only, of small numbers of marine mammals incidental to conducting pile driving activities in New Jersey state waters in accordance with Alternative 2 in NMFS' 2012 EA would not significantly impact the quality of the human environment, as described in this FONSI and in the EA.

In addition, all beneficial and adverse impacts of the action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environmental Impact Statement for this action is not necessary. The EA thereby provides a supporting analysis for this FONSI.



Helen M. Golde,
Acting Director, Office of Protected Resources,
National Marine Fisheries Service

JUN 25 2012

Date