



MARINE MAMMAL COMMISSION

6 August 2010

Mr. P. Michael Payne, Chief
Permits, Conservation, and Education Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, Maryland 20910-3225

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the application submitted by Bluewater Wind LLC seeking authorization under section 101(a)(5)(D) of the Marine Mammal Protection Act to take small numbers of marine mammals by harassment. The taking would be incidental to pile driving associated with installation of meteorological data collection facilities off the coasts of Delaware and New Jersey during two 8 to 12-hr periods in October and November 2010. The Commission also has reviewed the National Marine Fisheries Service's 22 July 2010 *Federal Register* notice (75 Fed. Reg. 42699) announcing receipt of the application and proposing to issue the authorization, subject to certain conditions.

RECOMMENDATION

The Marine Mammal Commission recommends that, prior to issuing the proposed incidental harassment authorization, the National Marine Fisheries Service require that observations be made during all soft-starts of pile-driving activities to gather the data needed to analyze and report on its effectiveness as a mitigation measure.

RATIONALE

Bluewater Wind plans to install one meteorological data collection facility 26 km off of the coast of Delaware and another facility 32 km off of the coast of New Jersey. The facilities will be used to determine the feasibility of commercial-scale offshore wind energy parks at the proposed project sites. The proposed activities would occur in waters 21 to 25 m in depth within the U.S. Exclusive Economic Zone. At each site, the applicant will install a single pile foundation 3 m in diameter to elevate and stabilize the meteorological data collection facility. To install the foundation, Bluewater Wind will use a hydraulic impact hammer with a maximum rated impact force of 900 kilojoules. The applicant anticipates that it will take 8 to 12 hours to mobilize and demobilize the construction vessels at each site, with 3 to 8 hours of pile driving per site. Crew boats, tugs, crane barges, and cargo barges will be involved in the proposed activities.

The Service preliminarily has determined that the proposed activities would result, at most, in a temporary modification in the behavior of small numbers of up to eight species of marine mammals and that any such effects would be negligible. The Service also does not anticipate any take of marine mammals by death or serious injury and expects that the potential for temporary or permanent hearing impairment will be at the lowest level practicable through the incorporation of the proposed mitigation measures. Exclusion zones will be established at the 180-dB re 1 μ Pa (rms)

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isopleth, verified by in-situ measurements, and re-established accordingly if the area exposed to 180 dB re 1 μ Pa (rms) exceeds the preliminary exclusion zone radius of 1 km. The exclusion zones will be monitored by at least one protected species observer stationed onboard the pile-driving vessel. Additionally, to facilitate protection of endangered large whale species, observers will be stationed onboard a separate vessel approximately 4 to 5 km from the pile-driving vessel to monitor a 7-km exclusion zone (the radius within which the sound level may exceed 160 dB re 1 μ Pa (rms)). The applicant also proposes to use soft-starts (ramp-up) when pile driving is initiated to allow marine mammals to vacate the area.

Mitigation

The Marine Mammal Commission has reviewed the proposed mitigation measures and believes that they are appropriate but incomplete. As the Commission has noted in previous correspondence, often in the context of seismic surveys, the effectiveness of ramp-up as a mitigation measure has yet to be empirically verified. As with the ramp-up of airguns, the Commission does not believe that the Service should assume, without empirical verification, that using soft-starts when pile driving constitutes an effective mitigation method. Such verification may require not only collecting opportunistic data but also designing and conducting studies to test specific hypotheses regarding the utility of soft-starts and analysis of responses of the various species encountered. For those reasons, the Marine Mammal Commission recommends that the National Marine Fisheries Service require that observations be made during all soft-starts of pile-driving activities to gather the data needed to analyze and report on its effectiveness as a mitigation measure. Such analyses would provide a stronger scientific basis for this particular monitoring measure. As it has noted in past correspondence, the Commission would be pleased to discuss with the Service the collection and analysis of such data and the design of such experiments to promote a better understanding of the utility and shortcomings of soft-starts and ramp-up as effective mitigation measures.

Please contact me if you have questions about the Commission's recommendation and comments.

Sincerely,



Timothy J. Ragen, Ph.D.
Executive Director