



May 7, 2014

Maureen Bornholdt
Renewable Energy Program Manager
Office of Renewable Energy
Bureau of Ocean Energy Management
381 Elden Street
Herndon, Virginia 20170

RE: Proposed Mitigation Measures to Protect North Atlantic Right Whales from Site Assessment and Characterization Activities of Offshore Wind Energy Development in the Rhode Island and Massachusetts Wind Energy Area

Dear Ms. Bornholdt:

The parties write to inform you of a major agreement between Deepwater Wind (DWW), a leading offshore wind developer and the holder of the Rhode Island and Massachusetts Wind Energy Area (RI/MA WEA) leases for the north and south zones, and Conservation Law Foundation (CLF), Natural Resources Defense Council (NRDC), and National Wildlife Federation (NWF). Under the terms of the agreement, DWW will implement additional mitigation measures to protect the North Atlantic right whale during certain site assessment and characterization activities necessary for offshore wind energy development in the RI/MA WEA.

The agreement is the result of an extensive and collaborative effort among parties that came together voluntarily to advance their mutual interest in the expeditious and environmentally responsible deployment of offshore wind energy. The North Atlantic right whale is the focus of the agreement because it is a critically endangered species. The agreement was developed with input from leading North Atlantic right whale scientific experts, including from the New England Aquarium, and has been endorsed by Environment America, International Fund for the Animal Welfare, Oceana and Sierra Club.

The agreement does not exempt DWW from any of the project design criteria that are detailed in Appendix B of the May 2013 Revised Environmental Assessment of Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic OCS Offshore Rhode Island and Massachusetts (RI/MA Revised EA) or in Addendum "C" of Leases Numbers OCS-A 0486 and OCS-A 0487. Nor is the agreement intended to indicate any insufficiency in the RI/MA Revised EA. The measures set forth in

this agreement do, however, reflect the commitment of DWW to undertake these steps, beyond existing requirements, to provide additional protections for the North Atlantic right whale.

We have agreed to the following mitigation measures to protect the North Atlantic right whale during site assessment and characterization activities related to offshore wind energy development in the RI/MA WEA. The agreement is limited to these specific activities in the RI/MA WEA. The agreement does not apply to site characterization and site assessment activities in any other wind energy area or project development site. Details of the agreement are as follows:

1. **Seasonal Restrictions on Sub-bottom Profiling and on Pile Driving for Meteorological Tower Installation:** Seasonal restrictions on sub-bottom profiling and pile driving for meteorological tower installation shall be as follows:

May 15 - October 31, the Green Period for pile driving, and May 15 –December 31, the Green Period for sub-bottom profiling: during this period sub-bottom profiling and pile driving for meteorological tower installation can occur in accordance with the RI/MA Revised EA and additional mitigation measures contained in this agreement, as applicable.

May 1 – May 14, The Yellow Period for pile driving, and January 1 –January 31 and May 1 –May 14, The Yellow Period for sub-bottom profiling: during these periods sub-bottom profiling and pile driving can occur in accordance with the RI/MA Revised EA and additional mitigation measures contained in this agreement, as applicable, provided:

That the Developer completes a site specific risk assessment that includes:

- an assessment of the potential for Right Whale activity during the period of survey;
- an acoustic assessment of the specific equipment to be used; and
- a site specific Marine Mammal Harassment Avoidance Plan.

The risk assessment shall be made available to Bureau of Ocean Energy Management (BOEM), National Marine Fisheries Service, and to the environmental organizations that are parties to this agreement prior to commencement of activities.

November 1– April 30, The Red Period for pile driving, and February 1 – April 30, The Red Period for sub-bottom profiling: These periods shall be a seasonal exclusion for pile driving and sub-bottom profiling activity. The parties believe that this particular measure is the most essential for reducing risk to right whales from sub-bottom profiling and pile driving.

2. **Vessel Speed Restriction:** A 10 knot speed limit restriction during the **Yellow** and **Red** periods on all vessels of any length associated with site assessment surveys and site characterization activities, including survey vessels as well as support vessels, operating in and transiting to and from the Wind Energy Area.

3. Use of Noise Attenuation and Source Level Reduction Technology during The Yellow Period for Pile Driving to Reduce Sound during Meteorological Tower Construction: The developer shall use the best commercially available technology, such as bubble curtains, cushion blocks, temporary noise attenuation pile design, vibratory pile drivers and/or press-in pile drivers, in order to reduce the pile driver source levels and horizontal propagation, unless such technology is prohibitively expensive for the project. The developer will employ engineering expertise to determine the best available technology for each pile driving site (or this may be done programmatically for a series of sites) and the engineering analysis and cost analysis shall be made available.

4. Establishment of Exclusion Zone:

Sub-bottom profiling: A minimum 500 m (1640 ft) radius exclusion zone for all marine mammals and sea turtles shall be established around the sub-bottom profiler, with an exception for dolphins that, in the determination of the visual observers, are approaching the vessel at a speed and vector that indicates voluntary approach to bow-ride. The presumed 500 meter exclusion zone should be confirmed using sound source validation before sub-bottom profiling begins, and the exclusion zone should be enlarged for the duration of site characterization activity if the 160 dB isopleth extends beyond 500 meters from the source. For sound source validation, developers will conduct in-field empirical measurements of the distances in the broadside and endfire directions at which broadband received levels (for boomer sources) or each operating frequency (for chirp sources) below 22 kHz reach 180 and 160 dB re 1 μ Pa (RMS) for the sub-bottom profiling source that will be employed. Results will be reported to BOEM and NMFS and made available within five days.

Pile driving: Except as extended during **The Yellow Period**, the developer commits to shutting down if a North Atlantic right whale is observed within the 160 dB re 1 μ Pa (RMS) isopleth around the pile-driving source. This provision should not be construed, however, to modify the visual monitoring requirements established by BOEM.

5. Real-time Monitoring Effort:

May 15 – October 31, The Green Period for pile driving, and May 15-December 31, The Green Period for sub-bottom profiling:

Sub-bottom profiling: Provide 2 dedicated, qualified NMFS-approved observers (1 on/1 off) at each sub-bottom profiling site to effectively maintain a steady visual watch during the course of the sub-bottom profiling.

Pile driving during meteorological tower installation: Provide a minimum of 4 dedicated, qualified NMFS-approved observers (2 on/2 off with each observer covering 180 degrees from bow to stern) at each pile driving site to effectively maintain a steady visual watch during the course of the pile driving activity and to provide for effective monitoring in all directions around the sound source.

January 1 – January 31 and May 1 – 14, The Yellow Period for sub-bottom profiling:

Sub-bottom profiling: Provide a minimum of 2 dedicated, qualified NMFS-approved observers (1 on/1 off) at each sub-bottom profiling site to effectively maintain a steady visual watch during the course of the sub-bottom profiling. Four dedicated, qualified NMFS-approved observers (2 on/ 2 off) shall be provided if the source vessel is of sufficient size to accommodate the two additional personnel. Observers employed during **The Yellow Period** for sub-bottom profiling shall have at least 1 year of experience as professional marine mammal observers or equivalent academic experience.

Visibility for sub-bottom profiling: Sub-bottom profiling can take place at night if the site-specific risk assessment shows acceptable results during night conditions. If the exclusion zone is obscured by fog, no sub-bottom profiling activity, including ramp-up, will be initiated until the exclusion zone is visible for 30 minutes.

May 1 – 14, The Yellow Period for pile driving:

Pile driving during meteorological tower installation: Provide a minimum of 4 dedicated, qualified NMFS-approved observers (2 on/2 off, with each observer covering 180 degrees from bow to stern) at each pile driving site to effectively maintain a steady visual watch during the course of the pile driving activity and to provide for effective monitoring in all directions around the sound source. Observers employed during **The Yellow Period** for pile driving shall have at least 1 year of experience as professional marine mammal observers or equivalent academic experience.

Visibility for pile driving: Pile driving will not take place at night. Developer will not start driving a pile unless, under normal circumstances, completion of the pile can be achieved during daylight hours. In the event that the developer begins driving a pile with the plan to achieve full penetration during daylight hours, but a situation arises that jeopardizes pile penetration if the drive is not completed, the developer may continue driving the pile into the nighttime hours to protect human health, the environment, or completion of the drive. If the exclusion zone is obscured by fog, no pile-driving activity, including ramp-up, will be initiated until the exclusion zone is visible for 30 minutes.

Additional monitoring for pile driving: The developer will conduct aerial monitoring and/or real-time passive acoustic monitoring sufficient to detect aggregations of foraging North Atlantic right whales within at least a 20km radius of the pile-driving source. The developer will maintain an extended exclusion zone for North Atlantic right whales, shutting down if any right whale is observed within the smaller of the 120 dB isopleth or 20-kilometer radius around the source.

6. **Adaptive Management Review:** The parties believe that the survey efforts underway in the MA WEA and RI/MA WEA should continue for a total of at least three years in each area. Yearly, or if one of the parties so requests, the parties agree to review the scientific data on North Atlantic right whales that has been collected as part of the above-mentioned survey efforts, along with any other available data, including sightings and information on new technologies or practices that have become available, and the agreed-to measures may be revised to reflect the new data and information. The parties also reserve their rights to consider again existing technologies or practices, which, although

not warranted at the time this agreement was signed, may need to be reconsidered in the view of new data.

7. **Other Regulatory Requirements:** In reaching this agreement, the developer and the environmental NGOs are aware that BOEM, NMFS, or other agencies have prescribed additional measures for the protection of North Atlantic right whales and other marine species, including the measures set forth in Addendum "C" of Leases Numbers OCS-A 0486 and OCS-A 0487. In the event of any disagreement between these measures and those prescribed by federal or state agencies, the more protective measures will apply.

8. The parties agree that these mitigation measures will remain in place for at least four years unless revisions are made at any earlier date pursuant to the adaptive management review provision above. After four years, the mitigation measures may also be revised to reflect new information and best practices that have become available.

To reiterate, the agreement is only applicable to site characterization and site assessment activities in the RI/MA WEA. It does not apply to any other wind energy area, including the MA WEA, or project development site. It does not apply to the construction and operations phases, nor does it imply or suggest what measures may be appropriate at the construction and operations phases. Construction and Operations Plans (COPs) will be subject to a separate environmental review, permitting, and approval process by the federal government.

Please feel free to contact us if you have any questions, and we look forward to continuing to work with you to ensure the deployment of environmentally responsible offshore wind energy in the United States.

Sincerely,



Jeff Grybowski
CEO

Deepwater Wind



John Kassel
President

Conservation Law Foundation



Frances Beinecke
President

Natural Resources Defense Council



Jim Lyon
Vice President for Conservation
National Wildlife Federation

Endorsed by:



Margie Alt
Executive Director
Environment America



Jackie Savitz
Vice President, U.S. Oceans
Oceana



Azzedine Downes
President and CEO
International Fund for Animal Welfare



Michael Brune
Executive Director
Sierra Club

cc: Sally Yozell, Director of Policy, NOAA
Lois Shiffer, General Counsel, NOAA
Samuel D. Rauch III, Deputy Asst. Admin. for Reg. Programs, NOAA
John Bullard, Administrator, Greater Atlantic Region, NOAA