



United States Department of the Interior

BUREAU OF OCEAN ENERGY MANAGEMENT
WASHINGTON, DC 20240-0001

DEC 19 2014

Mr. Jeffrey Grybowski
Chief Executive Officer
Deepwater Wind Block Island Transmission, LLC
56 Exchange Terrace, Suite 101
Providence, Rhode Island 02903

Dear Mr. Grybowski:

This letter serves to inform you that the Bureau of Ocean Energy Management (BOEM) has approved the General Activities Plan (GAP) proposed by Deepwater Wind Block Island Transmission, LLC (Deepwater Wind), dated April 20, 2012. Pursuant to 30 CFR 585.651, Deepwater Wind must comply with the requirements of Subpart G entitled "Facility Design, Fabrication, and Installation," found at 30 CFR 585.700-714 and submit a Safety Management System (SMS) in accordance with 30 CFR 585.810. Additionally, in accordance with Subpart G, the Grantee must submit a Facility Design Report (FDR) and a Fabrication and Installation Report (FIR), as outlined in 30 CFR 585.700-702. Pursuant to 30 CFR 585.706-708, a Certified Verification Agent (CVA) must be used to review and certify the FDR and FIR.

On April 20, 2012, Deepwater Wind submitted a GAP for the Block Island Transmission System (BITS) project pursuant to 30 CFR 585.601, and including the information required by 30 CFR 585.645. On May 31, 2012, Deepwater Wind submitted an Environmental Report (ER) for the BITS project in order to comply with 30 CFR 585.646, and submitted ER modifications on September 14, 2012, May 31, 2013, September 26, 2013, and February 13, 2014. BOEM reviewed the information provided by Deepwater Wind in the GAP and ER pursuant to 30 CFR 585.648 and determined that the GAP was complete and sufficient for BOEM to conduct technical and environmental reviews on August 8, 2014.

BOEM also determined that the proposed facility described in your GAP is complex and significant pursuant to 30 CFR 585.648(a)(1), and notified you in a letter dated August 8, 2014, of the requirement to submit a SMS, FDR and FIR, and use a CVA to review and certify the FDR and FIR. On September 18, 2014, Deepwater Wind submitted a CVA nomination for ABS Consulting (ABS). BOEM requested additional information on October 2, 2014, to assist in the review of the CVA nomination. Deepwater Wind provided additional information on October 13, 2014. BOEM reviewed the CVA nomination and additional information you provided, and approves ABS as Deepwater Wind's CVA as part of the GAP approval pursuant to 30 CFR 585.706

BOEM does not approve Deepwater Wind's request to depart from the decommissioning requirements as provided under 30 CFR 585.904 and as described in section 2.6 of the GAP at this time. As provided in 30 CFR 585.909, Deepwater Wind may propose to leave facilities in place in the decommissioning application.

The U.S. Army Corps of Engineers (USACE) is the lead Federal agency for purposes of complying with the National Environmental Policy Act (NEPA) and environmental consultations for the proposed Block Island Wind Farm (BIWF) and the BITS project. On September 4, 2014, the USACE completed an Environmental Assessment (EA) for the BIWF and BITS projects, and issued a Finding of No Significant Impact (FONSI). The USACE conducted consultations pursuant to the Endangered Species Act, Magnuson-Stevens Fishery Conservation and Management Act, National Historic Preservation Act (NHPA), and Coastal Zone Management Act. On September 4, 2014, the USACE issued permits pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act for the BITS and BIWF. BOEM conducted an independent review of the EA prepared by the USACE and adopted the EA in accordance with 40 CFR 1500.5(h) and pursuant to 43 CFR 46.320. On October 27, 2014, BOEM issued a FONSI for the issuance of a ROW grant, and approval of the GAP, with modifications, associated with the BITS project. BOEM approves Deepwater Wind's GAP, subject to the following conditions of approval, pursuant to 30 CFR 585.648(e).

1. General Standard Operating Conditions

- a. **Safety Management System (SMS).** The Grantee must provide a SMS and demonstrate that the SMS is fully functional prior to beginning activities described in the Grantee's approved GAP pursuant to 30 CFR 585.811. The SMS must include the following information related to the activities described in the GAP:
 - i. In addition what is required under 30 CFR 585.810(a), the SMS must describe the methods of hazard evaluation, risk analysis, work flow management (e.g., a permit-to-work system) and delineation of responsibilities between the Grantee and all contractors and subcontractors.
 - ii. In addition what is required under 30 CFR 585.810(b), the SMS must describe the aspects of design, manufacturing, installation, and operation that will be monitored and controlled remotely, and how it will be accomplished.
 - iii. In addition what is required under 30 CFR 585.810(c), the SMS must describe the types of emergencies that are possible and the procedures that will be employed in each case.
 - iv. In addition what is required under 30 CFR 585.810(e), the SMS must describe how and when audits will take place that look for evidence of a safety culture and test the robustness of the SMS to effectively create a safe workplace.
 - v. In addition what is required under 30 CFR 585.810(f), the SMS must describe the training that the Grantee will provide to contractors to ensure adequate SMS controls.
- b. **Environmental Compliance Monitoring Plan.** Thirty (30) calendar days prior to installation of the BITS, the Grantee must provide to the Grantor an environmental compliance monitoring plan describing the protocols the Grantee will use to comply with

the terms and conditions of GAP approval. The Grantor may require that the Grantee modify the environmental compliance monitoring plan to address any comments the Grantor submits to the Grantee on the contents of the environmental compliance monitoring plan in a manner deemed satisfactory to the Grantor prior to installation of the BITS.

- c. **Route Clearance Requirements.** The Grantee must comply with the following measures during the cable route clearance in the grant area: 1) if, during pre-lay grapnel activities, debris is snagged on the seabed by the grapnels, the attached item must be brought to the surface and the item examined and identified; 2) if it is safe to bring the item (e.g., wires, chains, rope and other small items) onboard, the item must be detached from the grapnels and stored on the vessel for later disposal ashore; 3) if the item is too large or it would be otherwise unsafe to bring the item onboard, then it must be lowered back to the seabed, detached, its position logged, and the information about its location must be provided to the Grantor as soon as practicable.
- d. **Route Position List (RPL).** The Grantee must provide a RPL of the final as-laid position of the BITS in excel-compatible tabular format and in accordance with International Cable Protection Committee (ICPC) Recommendation 11. The header will include the following, when applicable; system name, segment names, cable owners, RPL owner, RPL status, version number, issue date, datum, ellipsoid, depth units, vertical datum, and burial depth units.
 - i. The body of the RPL will include the following information about events:
 1. Event number
 2. Event label
 3. As laid date
 4. Latitude degrees
 5. Latitude minutes
 6. Latitude direction
 7. Longitude degrees
 8. Longitude minutes
 9. Longitude direction
 10. Water depth
 11. Route distance
 12. Cumulative route distance
 13. Slack
 14. Cable distance
 15. Cumulative cable distance
 16. Cable type
 17. Burial depth
 - ii. Events include, but are not limited to, the following:
 1. Alter course positions (A/C)
 2. Any changes in cable protection or engineering design

3. All cable and pipeline crossings and crossing angles
4. Entry and exit positions for United Nations Law of the Sea and United States of America Federally recognized waters including State Waters and Territorial Waters
5. Entry and exit positions for hazard areas including, but not limited to; military exercise area, dumping zones, explosive zones, fishing zones, anchorages, shipping lanes, cable areas and lease blocks

2. Standard Operating Conditions for Essential Fish Habitat

- a. The Grantee must provide vessel operators with maps of sensitive hard bottom habitat in the BITS cable installation area, as well as an anchoring plan that minimizes impacts to the hard bottom habitat to the greatest extent practicable. The Grantee must provide this plan to vessel operators for all anchoring activity including installation, maintenance, and decommissioning as described in the GAP.
- b. Thirty (30) calendar days prior to installation of the BITS, the Grantee must submit to the Grantor a benthic habitat monitoring plan to assess any unavoidable hard bottom habitat impacts that are anticipated to occur as a result of the BITS cable installation. The benthic habitat monitoring plan must provide an assessment of anticipated impacts on hard bottom habitat, as well as a plan for assessing recovery time for this sensitive habitat. The plan must include a means of recording observations of any detectable change in hard bottom habitats including changes in invasive species coverage. The Grantor may require that the Grantee modify the benthic habitat monitoring plan to address any comments the Grantor submits to the Grantee on the contents of the benthic habitat monitoring plan in a manner deemed satisfactory to the Grantor prior to the commencement of installation activities for the BITS in the grant area.
- c. The Grantee must conduct monitoring of the grant area to assess impacts to benthic habitat in compliance with the final benthic habitat monitoring plan, and submit reports to the Grantor detailing the results of the Grantee's post-installation monitoring activities. The Grantor may require that the Grantee mitigate impacts if areas along the cable route in the grant area do not recover or fill in naturally. The Grantee must include the schedule for submission of these reports in the benthic habitat monitoring plan.

3. Standard Operating Conditions for Cultural Resources

- a. The Grantee must comply with the stipulations in the Memorandum of Agreement (MOA) executed in June 2014 by the United States Army Corps of Engineers (USACE), Rhode Island State Historic Preservation Office, the Bureau of Ocean Energy Management (BOEM), Deepwater Wind Block Island Transmission, LLC, and the Narragansett Indian Tribal Historic Preservation Office.

4. Standard Dynamic Position (DP) Thruster Operating Conditions for Protected Species

- a. **DP Thruster Exclusion Zone** – The Grantee must establish a default exclusion zone, with a 160dB (RMS) isopleth radius, around the DP vessel when DP thrusters are in use within the grant area. The default exclusion zone must extend 21 meters (m) from the sound source (i.e., DP thrusters).
- b. **Field Verification of DP thruster sound source levels** – The Grantee must perform field verification of the default 21m radius exclusion zone (i.e., verify that the 160dB (RMS) isopleth does not extend beyond 21m) associated with DP vessel thruster use during cable installation in the grant area by taking acoustic measurements from two reference locations at two water depths (a depth at mid-water and a depth at approximately 1m above the seafloor). The Grantee must document the two reference locations with respect to their distance from the sound source. The acoustic monitoring must be sufficient to determine source levels (within 1m of the source) for the following:
 - i. **Marine mammal acoustic injury and harassment thresholds:** Distances to the 180dB (RMS) and 160dB (RMS) isopleths.
 - ii. **Atlantic sturgeon acoustic injury thresholds:** Distances to the 206dB (Peak) and 187dB cSEL isopleths.
 - iii. **Sea Turtle acoustic injury threshold:** Distance to the 207dB (RMS) isopleth.
- c. The Grantee must report the results of the field verification to National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) and the Grantor pursuant to section 4.p below.
- d. If the field measurements demonstrate that the actual 160dB (RMS) isopleth is less than the default exclusion zone, the Grantee may request that the Grantor approve the establishment of a modified exclusion zone. The Grantor will review such requests and the field verification results, and will inform the Grantee whether it approves of the modification in writing. The Grantor will coordinate with NMFS and the USACE when deciding whether to approve a modification of the exclusion zone.
- e. If the field measurements demonstrate that the actual 180dB or 160dB (RMS) isopleths extend beyond the 21m radius, the Grantee must notify the Grantor, USACE, and NMFS within 24 hours, and the Grantor will require modification of the exclusion zone.
- f. The Grantee must ensure that all observations for protected species in the exclusion zone are performed by NMFS-approved Protected Species Observers (PSOs). Observer qualifications must include direct field experience on a marine mammal/sea turtle observation vessel and/or aerial surveys in the Atlantic Ocean/Gulf of Mexico.

- g. The Grantee must ensure that the exclusion zone for all DP vessel operations within the grant area is monitored by a minimum of two PSOs around the sound source. The Grantee must ensure that the names and résumés of all PSOs are provided to the USACE at least thirty (30) calendar days prior to the scheduled start of DP vessel operations. No observer may work at the project site without written approval from NMFS. If, during DP vessel operations additional PSOs are necessary, the Grantee must provide those names and résumés to the USACE at least ten (10) calendar days prior to the date the observers are expected to start work at the site.
- h. The Grantee must ensure data on all observations are recorded based on standard PSO data collection requirements. The Grantee will ensure that all sightings of, and incidental interactions with, protected species are recorded using the data elements and data sheet provided by the Grantor (Attachments C and D of the FONSI). The Grantee must provide this information to NMFS within sixty (60) calendar days of the completion of DP vessel operations.
- i. The Grantee must ensure that when monitoring the exclusion zone, PSOs using binoculars, will estimate distances to protected species either visually, using laser range finders, or by using reticle binoculars during daylight hours. For nighttime DP thruster use during cable installation, the PSOs must employ night-vision binoculars to monitor the exclusion zone. If vantage points higher than 25 feet (ft) are available, distances can be measured using inclinometers. PSOs must record position data using hand-held or vessel global positioning system (GPS) units for each sighting, vessel position change, and any environmental change.
- j. The Grantee must ensure that when monitoring the exclusion zone, each PSO stationed on or in proximity to the noise-producing vessel will scan the surrounding area for visual indications of protected species that may enter the zone. Observations will take place from the highest available vantage point on the associated operational platform. The PSOs must conduct 360-degree scanning during the monitoring periods, and target scanning when the PSO is alerted of the presence of protected species.
- k. The Grantee must ensure that prior to initiation of installation work, all crew members on barges, tugs, and support vessels will undergo environmental training, a component of which will focus on the procedures for sighting and protection of protected species. The Grantee will ensure that a briefing that: (1) establishes the responsibilities of each party, (2) defines the chains of command, (3) explains communication procedures, (4) provides an overview of monitoring purposes, and (5) reviews operational procedures, is conducted among the construction supervisors and crews, the dedicated lookouts (pursuant to section 6(c)), PSOs, and the Grantee. The Grantee must brief new personnel as they join the work in progress.
- l. If protected species are seen at or within the exclusion zone during DP thruster operations, the Grantee will reduce DP thrusters to the maximum extent possible, except under circumstances when doing so would compromise safety (both human health and environmental) and/or the integrity of the Project. Normal DP thruster use may resume

when PSOs report that the exclusion zone has remained clear of protected species for a minimum of sixty (60) minutes.

- m. The Grantee must ensure that the PSOs have direct communication with the Deepwater Wind Construction Compliance Manager or other authorized individual who has the authority to reduce DP thrusters to the maximum extent possible or delay DP thruster activities. The authorized individual must comply immediately with a call by the PSO to reduce DP thrusters to the maximum extent possible or delay DP thruster activities. Any disagreement or discussion should occur only after delay or DP thruster reduction, except under circumstances when delays or DP thruster reduction would compromise safety (both human health and environmental) and/or the integrity of the Project.
- n. The Grantee must ensure that PSOs coordinate their watch schedules to ensure constant monitoring of the exclusion zone, with sufficient breaks to ensure effective monitoring. An observer's combined watch schedule will not exceed 12 hours during a 24-hour period.
- o. The Grantee will ensure that the USACE, NMFS, and the Grantor are contacted at least 24 hours prior to the commencement of installation activities in the grant area and again within 24 hours of the completion of the activity in the grant area.
- p. The Grantee will ensure that, within seven (7) days of establishing the default exclusion zone, the USACE, NMFS, and the Grantor receive a report detailing the field verification measurements. This report will include the following information: a detailed account of the levels, durations, and spectral characteristics of the DP thruster use, and Peak, RMS, and energy levels of the sound pulses and their durations as a function of distance, water depth, and tidal cycle.
- q. The Grantee must report any observed behavioral reactions (e.g., animals departing the area) or injury or mortality to any marine mammals, Atlantic sturgeon, or sea turtles
- r. associated with project-related activities to USACE, NMFS, and the Grantor within 24 hours of observation.
- s. The Grantee must contact NMFS and the Grantor within 24 hours of any observations of dead or injured Endangered Species Act (ESA)-listed species. The Grantee must make reasonable attempts to collect any dead sea turtles or sturgeon. The Grantee must hold these individuals in cold storage until the Grantee discusses disposition with NMFS.
- t. If any sturgeon are observed, the Grantee must report these instances to USACE, the Grantor, and NMFS within 24 hours.
- u. The Grantee must provide a final technical report to USACE, NMFS, and the Grantor within 120 calendar days after completion of the installation activities. This report must provide full documentation of methods and monitoring protocols (including verification of the sound levels actually produced within the exclusion zone), summarize the data

recorded during monitoring comparing these values to the estimates of protected species that were expected to be exposed to disturbing levels of noise during installation activities, and provide an interpretation of the results and effectiveness of all monitoring tasks.

v. Reports must be sent to:

Bureau of Ocean Energy Management
 Environment Branch for Renewable Energy
 Phone: 703-787-1340
 Email: renewable_reporting@boem.gov

National Marine Fisheries Service
 Northeast Regional Office, Protected Resources Division
 Section 7 Coordinator
 Phone: 978-281-9328
 Email: incidental.take@noaa.gov

5. Standard Operating Conditions for High Resolution Geophysical (HRG) Surveys Mitigation and Monitoring

- a. The Grantee must ensure that prior to initiation of HRG survey work, all crew members on barges, tugs and support vessels will undergo environmental training, a component of which will focus on the procedures for sighting and protection of protected species. The Grantee will ensure that a briefing that (1) establishes the responsibilities of each party, (2) defines the chains of command, (3) explains communication procedures, (4) provides an overview of monitoring purposes, and (5) reviews operational procedures, is conducted between the construction supervisors and crews, the dedicated lookouts (pursuant to Section 6(c) below), PSOs, and the Grantee. The Grantee must brief new personnel as they join the work in progress.
- b. The Grantee must ensure that all observations for protected species in the exclusion zone are performed by NMFS-approved PSOs. Observer qualifications must include direct field experience on a marine mammal/sea turtle observation vessel and/or aerial surveys in the Atlantic Ocean/Gulf of Mexico. The Grantee must ensure that the names and résumés of all PSOs are provided to the USACE at least thirty (30) calendar days prior to the scheduled start of HRG surveys. No observer may work at the project site without written approval from NMFS. If, during HRG surveys, additional PSOs are necessary, the Grantee must provide those names and résumés to the USACE at least ten (10) calendar days prior to the date the observers are expected to start work at the site.
- c. The Grantee must ensure the following measures are followed during all HRG surveys operating at frequencies below 200 kHz that are conducted within the grant area:
 - i. **Electromechanical Survey Equipment Ramp-Up:** The Grantee must ensure that, when technically feasible, a "ramp-up" of the electromechanical survey

equipment occurs at the start or re-start of HRG survey activities. A ramp-up would begin with the power of the smallest acoustic equipment for the HRG survey at its lowest power output. The power output would be gradually turned up and other acoustic sources added in a way such that the source level would increase in steps not exceeding 6dB per 5-minute period.

- ii. **Establishment of HRG Exclusion Zone:** The Grantee must establish a 300m radius exclusion zone around the HRG sound source. The 300m exclusion zone must encompass the 160dB (RMS) isopleth.
- iii. **Field Verification of HRG sound source levels:** The Grantee must perform field verification of the default 300m radius exclusion zone (i.e., verify that the 160dB (RMS) isopleth does not extend beyond 300m) associated with HRG operations, by taking acoustic measurements from two reference locations at two water depths (a depth at mid-water and a depth at approximately 1m above the seafloor). The Grantee must document the two reference locations with respect to their distance from the sound source. The acoustic monitoring must be sufficient to determine source levels (within 1m of the source) for marine mammal acoustic injury and harassment thresholds (i.e., distances to the 180dB (RMS) and 160dB (RMS) isopleths).
- iv. The Grantee must report the results of the field verification to NMFS and the Grantor, pursuant to section 5.c.xv below.
- v. If the field measurements demonstrate that the actual 160 dB (RMS) isopleth is less than the default exclusion zone, the Grantee may request that the Grantor approve the establishment of a modified exclusion zone. The Grantor will review such requests and the field verification results to determine whether to approve any such modification, and communicate this decision to the Grantee in writing (e.g., email). The Grantor will coordinate with NMFS and the USACE when deciding whether to approve a modification of the exclusion zone.
- vi. If the field measurements demonstrate that the actual 180dB or 160dB (RMS) isopleths extend beyond the 300m radius, the Grantee must notify the Grantor, USACE, and NMFS within 24 hours, and the Grantor will require modification of the exclusion zone.
- vii. **Visual Monitoring of the Exclusion Zone:** The Grantee must ensure that the exclusion zone for all HRG surveys is monitored by at least one NMFS-approved PSO around the sound source. The PSO must keep vigilant watch for the presence of marine mammals within the exclusion zone. The PSO will monitor the exclusion zone for 30 minutes prior to the ramp up of sound sources. If marine mammals are observed at or within the exclusion zone, ramp-up will be delayed until the exclusion zone is clear of marine mammals for 30 minutes. If the exclusion zone is obscured by fog or poor lighting conditions, the Grantee will

not initiate HRG survey activities until the entire exclusion zone is visible for the 30 minute period.

- viii. The Grantee must ensure that PSOs coordinate their watch schedules to ensure constant monitoring of the exclusion zone, with sufficient breaks to ensure effective monitoring. An observer's combined watch schedule will not exceed 12 hours during a 24 hour period.
- ix. The Grantee must ensure that the PSO has direct communication with the Deepwater Wind Construction Compliance Manager or other authorized individual who has the authority to shut-down or power down noise-producing equipment. The authorized individual must comply immediately with a call by the PSO to shut-down or power down noise-producing equipment. Any disagreement or discussion should occur only after shut-down or power down of the noise-producing equipment, except under circumstances when shut-down or power down of the noise-producing equipment would compromise safety (both human health and environmental) and/or the integrity of the Project.
- x. When monitoring the exclusion zone, each PSO stationed on the HRG vessel will scan the surrounding area for visual indications of protected species that may enter the zone. Observations will take place from the highest available vantage point. The PSOs must conduct 360-degree scanning during the monitoring periods, and target scanning when the PSO is alerted of the presence of protected species.
- xi. The Grantee must ensure that when monitoring the exclusion zone, PSOs, using binoculars, estimate distances to protected species either visually, using laser range finders, or by using reticle binoculars during daylight hours. If vantage points higher than 25 ft are available, distances can be measured using inclinometers. PSOs must record position data using hand-held or vessel GPS units for each sighting, vessel position change, and any environmental change.
- xii. Power Down for Delphinoid Cetaceans and Pinnipeds: If a delphinoid cetacean or pinniped is sighted at or within the exclusion zone, the electromechanical survey equipment must be powered down to the lowest power output that is technically feasible. Subsequent power up of the electromechanical survey equipment must use the ramp-up provisions described in section 5.c.i above and may occur after (1) the exclusion zone is clear of delphinoid cetaceans and pinnipeds or (2) a determination by the PSO after a minimum of 10 minutes of observation that the delphinoid cetacean or pinniped is approaching the vessel at a speed and vector that indicates voluntary approach. An incursion into the exclusion zone by a non-delphinoid cetacean during power-down requires implementation of shut-down procedures described below.

- xiii. **Shut-Down:** If a non-delphinoid cetacean is sighted at or within the exclusion zone, an immediate shutdown of the electromechanical survey equipment is required. Subsequent restart of the electromechanical survey equipment may only occur following clearance of the exclusion zone for the thirty (30) minute period and implementation of ramp-up procedures.
- xiv. The Grantee will ensure that all sightings of, and incidental interactions with, protected species are recorded using the data elements and data sheet provided by the Grantor (Attachments C and D of the FONSI). The Grantee must provide this information to NMFS within sixty (60) calendar days of the completion of HRG survey operations.
- xv. The Grantee will ensure that, within seven (7) days of establishing the exclusion zone, the USACE, NMFS, and the Grantor receive a report detailing the field-verification measurements. This report will include the following information: a detailed account of the levels, durations, and spectral characteristics of the HRG sound sources, and Peak, RMS, and energy levels of the sound pulses and their durations as a function of distance, water depth, and tidal cycle.
- xvi. The Grantee must report any observed behavioral reactions (e.g., animals departing the area) or injury or mortality to any marine mammals, Atlantic sturgeon, or sea turtles associated with project-related activities to USACE, NMFS, and the Grantor within 24 hours of observation.
- xvii. The Grantee must contact NMFS and the Grantor within 24 hours of any observations of dead or injured ESA-listed species. The Grantee must make reasonable attempts to collect any dead sea turtles or sturgeon. The Grantee must hold these individuals in cold storage until the Grantee discusses disposition with NMFS.
- xviii. If any sturgeon are observed, the Grantee must report these instances to USACE, the Grantor, and NMFS within 24 hours.
- xix. The Grantee must provide a final technical report to USACE, NMFS, and the Grantor within 120 calendar days after completion of the installation activities. This report must provide full documentation of methods and monitoring protocols (including verification of the sound levels actually produced within the exclusion zone), summarize the data recorded during monitoring comparing these values to the estimates of listed marine mammals and sea turtles that were expected to be exposed to disturbing levels of noise during installation activities, and provide an interpretation of the results and effectiveness of all monitoring tasks.

xx. Reports must be sent to:

Bureau of Ocean Energy Management
Environment Branch for Renewable Energy
Phone: 703-787-1340
Email: renewable_reporting@boem.gov

National Marine Fisheries Service
Northeast Regional Office, Protected Resources Division
Section 7 Coordinator
Phone: 978-281-9328
Email: incidental.take@noaa.gov

6. Standard Operating Conditions for Vessel Strike Avoidance

- a. The Grantee must ensure that all vessels comply with the vessel strike avoidance measures specified in this section, except under extraordinary circumstances when complying with these requirements would put the safety of the vessel or crew at risk.
- b. The Grantee must ensure that vessel operators, crews, dedicated lookouts (section 6.c below), and PSOs maintain a vigilant watch for cetaceans, pinnipeds, and sea turtles and slow down or stop their vessel to avoid striking these protected species.
- c. The Grantee will ensure that PSOs will be placed on DP vessels and that other vessels associated with activities within the grant area will have a dedicated lookout to watch for cetaceans, pinnipeds, and sea turtles.
- d. The Grantee must ensure that all vessels operating from November 1 through July 31, operate at speeds of 10 knots (18.5 km/hr) or less. In addition, the Grantee must ensure that all vessel operators comply with 10 knot (18.5 km/hr) speed restrictions in any Dynamic Management Area.
- e. North Atlantic right whales.
 - i. The Grantee must ensure all vessels maintain a separation distance of 500m (1,640 ft) or greater from any sighted North Atlantic right whale.
 - ii. The Grantee must ensure that the following avoidance measures are taken if a vessel comes within 500m (1,640 ft) of any North Atlantic right whale:
 1. If underway, vessels must steer a course away from any sighted North Atlantic right whale at 10 knots (18.5 km/h) or less until the 500m (1,640 ft) minimum separation distance has been established (except as provided in section 6.e.ii.2 below).

2. If a North Atlantic right whale is sighted in a vessel's path, or within 100m (328 ft) of an underway vessel, the underway vessel must reduce speed and shift the engine to neutral. The Grantee must not engage the engines until the North Atlantic right whale has moved outside the vessel's path and beyond 100m (328 ft).
 3. If a vessel is stationary, the vessel must not engage engines until the North Atlantic right whale has moved beyond 100m (328 ft), at which point the Grantee must comply with section 6.e.ii.1 above.
- f. Non-delphinoid cetaceans other than the North Atlantic right whales.
- i. The Grantee must ensure all vessels maintain a separation distance of 100m (328 ft) or greater from any sighted non-delphinoid cetacean.
 - ii. The Grantee must ensure that the following avoidance measures are taken if a vessel comes within 100m (328 ft) of any non-delphinoid cetacean:
 1. If any non-delphinoid cetacean is sighted, the vessel underway must reduce speed and shift the engine to neutral, and must not engage the engines until the non-delphinoid cetacean has moved outside of the vessel's path and beyond 100m (328 ft).
 2. If a vessel is stationary, the vessel must not engage engines until the non-delphinoid cetacean has moved out of the vessel's path and beyond 100m (328 ft).
- g. Delphinoid cetaceans.
- i. The Grantee must ensure that all vessels maintain a separation distance of 50m (164 ft) or greater from any sighted delphinoid cetacean.
 - ii. The Grantee must ensure the following avoidance measures are taken if the vessel comes within 50m (164 ft) of a sighted delphinoid cetacean:
 1. The Grantee must ensure that any vessel underway remain parallel to a sighted delphinoid cetacean's course whenever possible, and avoid excessive speed or abrupt changes in direction. The Grantee may not adjust course and speed until the delphinoid cetacean has moved beyond 50m (164 ft) and/or the delphinoid cetacean has moved abeam of the underway vessel.
 2. The Grantee must ensure that any vessel underway reduces vessel speed to 10 knots (18.5 km/h) or less when pods (including mother/calf pairs) or large assemblages of delphinoid cetaceans are observed. The Grantee may not adjust course and speed until the delphinoid cetaceans have moved beyond 50m (164 ft) and/or abeam of the underway vessel.

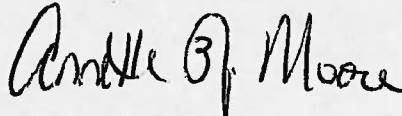
h. Sea Turtles and Pinnipeds.

The Grantee must ensure all vessels maintain a separation distance of 50m (164 ft) or greater from any sighted sea turtle or pinniped.

- i. Vessel Operator Briefing.** The Grantee must ensure that all vessel operators are briefed to ensure they are familiar with the requirements specified in section 6 above.

Please do not hesitate to contact Ms. Jessica Stromberg at (703) 787-1730 if you have any questions.

Sincerely,



Annette J. Moore
Acting Program Manager
Office of Renewable Energy Programs

Enclosures
Incident Report: Projected Species
Injury or Mortality
Required Data Elements for Protected
Species Observer Reports

Attachment C. Incident Report: Protected Species Injury or Mortality

Photographs/Video should be taken of all injured or dead animals.

Observer's full name: _____

Reporter's full name: _____

Species Identification: _____

Name and type of platform: _____

Date animal observed: _____ Time animal observed: _____

Date animal collected: _____ Time animal collected: _____

Environmental conditions at time of observation (i.e. tidal stage, Beaufort Sea State, weather):

Water temperature (°C) and depth (m/ft) at site: _____

Describe location of animal and events 24 hours leading up to, including and after, the incident (incl. vessel speeds, vessel activity and status of all sound source use):

Photograph/Video taken: YES / NO If Yes, was the data provided to NMFS? YES / NO
(Please label *species, date, geographic site* and *vessel name* when transmitting photo and/or video)

Date and Time reported to NMFS Stranding Hotline: _____

Sturgeon Information: (please designate cm/m or inches and kg or lbs)

Species: _____

Fork length (or total length): _____ Weight: _____

Condition of specimen/description of animal: _____

Fish Decomposed: NO SLIGHTLY MODERATELY SEVERELY

Fish tagged: YES / NO If Yes, please record all tag numbers.

Tag #(s): _____

Genetic samples collected: YES / NO

Genetics samples transmitted to: _____ on _____ / _____ /201....

Sea Turtle Species Information: *(please designate cm/m or inches)*

Species: _____ Weight (kg or lbs): _____

Sex: Male Female Unknown

How was sex determined?: _____

Straight carapace length: _____ Straight carapace width: _____

Curved carapace length: _____ Curved carapace width: _____

Plastron length: _____ Plastron width: _____

Tail length: _____ Head width: _____

Condition of specimen/description of animal: _____

Existing Flipper Tag Information

Left: _____ Right: _____

PIT Tag#: _____

Miscellaneous:

Genetic biopsy collected: YES NO Photographs taken: YES NO

Turtle Release Information:

Date: _____ Time: _____

Latitude: _____ Longitude: _____

State: _____ County: _____

Remarks: (note if turtle was involved with tar or oil, gear or debris entanglement, wounds, or mutilations, propeller damage, papillomas, old tag locations, etc.) _____

Marine Mammal information: *(please designate cm/m or ft/inches)*

Length of marine mammal (note direct or estimated): _____

Weight (if possible, kg or lbs): _____

Sex of marine mammal (if possible): _____

How was sex determined?: _____

Confidence of Species Identification: SURE UNSURE BEST GUESS

Description of Identification characteristics of marine mammal: _____

Genetic samples collected: YES / NO

Genetic samples transmitted to: _____ on _____ / _____ /201....

Fate of marine mammal: _____

Description of Injuries Observed: _____

Other Remarks/Drawings: _____

Attachment D. Required Data Elements for Protected Species Observer Reports

The Grantee must ensure that the protected-species observer record all observations of protected species using standard marine mammal observer data collection protocols. The list of required data elements for these reports is provided below:

1. Vessel name;
2. Observers' names and affiliations;
3. Date;
4. Time and latitude/longitude when daily visual survey began;
5. Time and latitude/longitude when daily visual survey ended; and
6. Average environmental conditions during visual surveys including:
 - a. Wind speed and direction;
 - b. Sea state (glassy, slight, choppy, rough, or Beaufort scale);
 - c. Swell (low, medium, high, or swell height in meters); and
 - d. Overall visibility (poor, moderate, good).
7. Species (or identification to lowest possible taxonomic level);
8. Certainty of identification (sure, most likely, best guess);
9. Total number of animals;
10. Number of juveniles;
11. Description (as many distinguishing features as possible of each individual seen, including length, shape, color and pattern, scars or marks, shape and size of dorsal fin, shape of head, and blow characteristics);
12. Direction of animal's travel – related to the vessel (drawing preferably);
13. Behavior (as explicit and detailed as possible; note any observed changes in behavior);
14. Activity of vessel when sighting occurred.