United States Department of the Interior

FISH AND WILDLIFE SERVICE

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June 20, 2011

Maureen A. Bornholdt
Program Manager
Office of Offshore Alternative Energy Programs
381 Elden Street
Herndon, Virginia 20170-4817

RE: Biological Assessment for Commercial Wind Lease Issuance, Associated Site Characterization Activities and Subsequent Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore New Jersey, Delaware, Maryland, and Virginia

Dear Mrs. Bornholdt:

The U.S. Fish and Wildlife Service (Service) received your request for informal consultation and your Biological Assessment (BA) on the above referenced project by mail on March 24, 2011 and by e-mail on March 28, 2011. The comments provided below are in accordance with Section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

According to the information provided in your BA dated March 2011, the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) proposes the issuance of offshore wind energy leases and approval of site assessment activities in the mid-Atlantic region of the Outer Continental Shelf. The proposed action is the issuance of commercial and research renewable energy leases within the Wind Energy Areas (WEAs) offshore New Jersey, Delaware, Maryland, and Virginia, and approval of site assessment activities on those leases. The regional EA will consider the environmental consequences associated with reasonably foreseeable site characterization scenarios associated with the leasing (including geophysical, geotechnical, archeological, and biological surveys), and reasonably foreseeable site assessment scenarios (including the installation and operation of meteorological towers and buoys) in the WEAs. The proposed activity would encompass the 4 WEAs composed of 117 OCS lease blocks located off the coasts of New Jersey, Delaware, Maryland, and Virginia. The proposed action scenario estimates a maximum of 10 meteorological towers and 20 meteorological buoys to be constructed throughout all of the mid-Atlantic WEAs.

The federally listed Roseate tern (*Sterna dougallii dougalli*) and piping plover (*Charadrius melodus*) are known to occur in the shoreline areas of these coasts. In addition the Red Knot (*Calidris canutus rufa*) is a candidate for listing, and migrates through the coastal areas in spring and fall. The Service will be working on a proposed listing rule for the red knot in 2012. The federally endangered cahow

(*Pterodroma cahow*) utilizes the Outer Continental Shelf in North Carolina as an important feeding area, so we consider this species to be potentially present in southern waters offshore of Virginia in the WEA. Therefore, we recommend that you include this species in your consultation and make a determination.

The extent to which these species occur in the proposed lease areas which are between 7 and 37 miles off shore, is not known, however, we consider the collision risk from a maximum of 10 meteorological towers and 20 meteorological buoys constructed throughout all of the mid-Atlantic WEAs to be negligible. The greater threat posed by these towers is the enhanced probability of an oil spill to the coastal areas from collision between these towers and commercial vessels. Although these towers will not be located in designated traffic zones, several of the lease areas appear to be close to shipping lanes and accident rates are expected to be greater as more obstacles are placed out in the ocean. Thus placement of these towers does pose some increase in the risk of oil-spills arriving on-shore or near-shore where these birds are more likely to occur. We understand that there will be every effort to identify these towers to pilots navigating commercial vessels in these areas, and lighting of these towers and mapping should reduce this risk. Thus, while there is likely to be some increased risk of oil spills from the placement of these towers, we consider this increase in risk to be small and insignificant for the Roseate Tern, Piping Plover, and Red Knot. Therefore, the Service finds that these meteorological tower and buoy construction projects are not likely to adversely affect the three listed species of concern under our jurisdiction.

Recommendations for Additional Data Collection of Meteorological Towers

The purpose of the meterological towers and buoys is to acquire meteorological and oceanographic information to evaluate the design and engineering criteria for future wind projects, as well as provide information on environmental conditions to support regulatory permitting reviews. We recommend that visibility sensors be installed on the met towers to provide measures of visibility (see http://www.allweatherinc.com/meteorological/toc_vis.html). The data should be logged in such a way that we can discern how often low visibility conditions occur, at the approximate height of the turbine blades) during various times of the year. We received a letter from James Kendall from BOEMRE in October 2010 stating that they would not be able to collect visibility data with the met buoys, and stated that they would work with the Service to find other methods of gathering bird and bat data in areas where they install the buoys. It is our hope that BOEMRE is committed to obtaining the best data possible to evaluate the impacts of offshore wind farms on threatened and endangered species, and other wildlife such as migratory birds and bats.

Consultation on Installation and Operation of Wind Turbine Generators

Consultation on any eventual wind energy farms in these lease areas will require preparation of a biological assessment pursuant to Section 7(c) of the ESA, possibly leading to the preparation of a formal biological opinion pursuant to Section 7(b). We do have concerns that wind turbines located offshore may pose a collision risk to these listed and candidate species. A risk assessment (Burger et al., 2011) conducted for these species for offshore wind facilities to be operated in the mid-Atlantic OCS concluded that roseate terns could be at risk for collision mortality both during the migratory season and the breeding seasons, while piping plovers and red knots are only potentially exposed to this risk during the spring and fall migrations in the northeast (Burger et al., 2011). Additionally, recent surveys and observations of banded piping plovers indicate that an extremely large proportion

of Atlantic Coast breeders winter in the Bahamas and must traverse the Atlantic OCS during migration. Citations to formal reports and/or publications will be forthcoming. The cahow may occur in the Virginia lease areas during some weather conditions or while foraging outside of the breeding season.

We note that the permitting the placement of up to 10 meteorological towers and 20 meteorological buoys throughout the four WEAs is clearly different from that of a proposed wind generation system, consisting of many towers, each with large rotating blades. The scope of the analyses, conclusions and outcome of the subsequent energy farm consultation may differ significantly from those contained in this concurrence letter.

The potential for oils spills resulting from collisions between oil tankers and towers placed in oceanic waters adjacent to shipping channels is not explicitly dealt with in this March 2011 BA. This is especially relevant to the proposed WEA off the mouth of the Delaware Bay, which receives the greatest volume of oil tankers on the Atlantic Coast of the U.S. While the placement of up to 10 meteorological towers and 20 meteorological buoys throughout the four WEAs may have only a minor effect on the projected frequency of oil spills, the effect of installation of numerous wind turbines will be much more significant. Therefore, we recommend that BOEMRE include a thorough analysis of effects on oil tanker collisions/spills in the future BA's developed for the actual wind turbines proposed to be installed in the mid-Atlantic coastal area. This would include predictions of the likelihood of such spills reaching the shorelines used by piping plovers and other habitats used by Roseate terns and red knots and/or analysis of other areas with offshore wind farms.

We appreciate the opportunity to provide information relevant to threatened and endangered fish and wildlife resources. This ESA determination does not address other Federal statutes protecting wildlife, such as the Migratory Bird Treaty Act and does not exempt the project from obtaining all permits and approvals that may be required by other State or Federal agencies. Should you have any questions or concerns regarding this letter, please contact Julie Slacum of my Endangered Species staff at (410) 573-4595 or by email at Julie_thompson@fws.gov.

Sincerely,

Leopoldo Miranda
Supervisor

cc: Julie Crocker, NOAA N.E. Regional Office
Anne Hecht, U.S. Fish and Wildlife Service
Tylan Dean, U.S. Fish and Wildlife Service
Wendy Walsh, Fish and Wildlife Biologist

Literature Cited

Burger, J., C. Gordon, J. Lawrence, J. Newman, G. Forcey, L. Vlietstra. 2011. Risk Evaluation for federally listed (roseate tern, piping plover) or candidate (red knot) bird species in offshore waters: A first step for managing the potential impacts of wind facility development on the Outer Continental Shelf. Renewable Energy 36: 338-351.