ENVIRONMENTAL STUDIES PROGRAM: ONGOING STUDIES

MMS OCS Region: Atlantic

Title: Potential for Interactions between Endangered and Candidate Bird Species with Wind Facility Operations on the Atlantic OCS

Total Cost: $1,116,594 **Period of Performance:** FY 2008-2011

Conducting Organization: Pandion Systems, Inc.

MMS Contact: Dr. James Woehr

Description:
Background With the passage of the Energy Policy Act of 2005, MMS was delegated responsibilities for alternative energy activities on the Outer Continental Shelf. This new responsibility includes offshore wind energy projects. Experience from onshore wind development suggests that the siting of facilities is critical to minimize impacts to bird species. Of key concern is the potential for offshore wind facilities to impact endangered, threatened, or candidate species of birds that migrate along the Atlantic Coast. Several bird species have been identified as potentially being impacted by offshore wind facilities, specifically piping plovers, roseate terns, and red knots. Whether these birds actually fly or migrate into Federal jurisdiction, greater than three nautical miles offshore, is not known, with the exception of observations of roseate terns in Nantucket Sound.

Any evaluation will need to address several key questions. First, do the birds actually fly offshore where they may be at risk or not. If they potentially do, could various weather conditions alter that risk? European observations of birds indicate that some species practice avoidance of wind structures and any determination of risk will need to assess whether these birds do avoid the facilities. If there is a potential for bird strikes, an evaluation of the impacts of mortality on the population will need to be assessed.

Objectives The objective of the study is to determine whether endangered, threatened or candidate species of birds are at risk from offshore wind facilities.

Methods The research will include both evaluation of existing data to determine key locations of the bird species of interest and potential areas of high use where risk may be increased. Collection of field data may be required.

Importance to MMS Development of offshore alternative energy facilities, particularly wind turbines, have the potential to impact bird species. Of particular concern is the potential for endangered or candidate species to be impacted by offshore wind facilities with resultant population impacts. The information will be critical in the decision of placement of these facilities.

Current Status: The contractor has completed reviewing existing information and methodologies. Three subtasks are now underway. One task is developing methods to monitor

the species of interest using acoustic techniques. A second task is tracking red knots through the use of light sensing tags. A third task is evaluating avoidance behavior of roseate terns.

Final Report Due: September 2011

Publications: None.

Affiliated WWW sites: None.

Revised date: October 15, 2009