UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
PROGRAM PLANNING AND INTEGRATION
Silver Spring, Maryland 20910

Michelle Morin
BOEM Office of Renewable Energy Programs
381 Elden Street, HM 1328
Herndon, Virginia 20170-4817
michelle.morin@boem.gov

Ms. Morin:

The National Oceanic and Atmospheric Administration (NOAA) has reviewed the Bureau of Ocean Energy Management (BOEM) Environmental Assessment for Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina.

Please see the attachments for a full list of NOAA's comments. Please direct any questions you may have regarding these comments to:

National Ocean Service U.S. Integrated Ocean Observing System Office (IOOS)
(Attachment 1)
Mr. Jack Harlan
Project Manager, HF Radar Ocean Remote Sensing
240-478-9942
jack.harlan@noaa.gov

or

National Marine Fisheries Service Southeast Regional Office
(Attachment 2)
Ms. Barb Zoodsma
Southeast U.S. Right Whale Recovery Program Coordinator
904-321-2806
barb.zoodsma@noaa.gov

Sincerely,

MONTANIO.PATRICIA.A.1365839030

Digitally signed by MONTANIO.PATRICIA.A.1365839030
DN: c=US, o=U.S. Government, ou=DoD, ou=PKI, ou=OTHER, cn=MONTANIO.PATRICIA.A.1365839030
Date: 2015.02.24 09:00:48 -05'00'

Patricia A. Montanio
NOAA NEPA Coordinator

Attachment 1

National Ocean Service U.S. Integrated Ocean Observing System Office (IOOS):

The National Ocean Service (NOS) has reviewed the Federal Register notice (80 FR 01101) published on January 23, 2015, soliciting public comment on the Notice of Availability Environmental Assessment for Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina.

NOS appreciates the efforts of the Bureau of Ocean Energy Management (BOEM) to engage programs across the National Oceanic and Atmospheric Administration (NOAA). As such, we understand that BOEM is already familiar with NOS products and services as they relate to energy (for example, nautical charting, coastal management, ocean observations, and coastal science). NOS is available to discuss any of our priorities, programs, and projects as needed (http://oceanservice.noaa.goc/about/).

In regards to the above mentioned Federal Register Notice, I am submitting the following comments on behalf of NOS. We are highlighting, for BOEM's awareness, the location of high frequency radars supported by the U.S. Integrated Ocean Observing System (IOOS).

Our search of the Environmental Assessment (BOEM 2015-009) indicates that interference to high frequency (HF) radar operations has not been mentioned. There are a total of six (6) HF radars in Virginia (one radar), North Carolina (four radars) and South Carolina (one radar) that could be negatively impacted to some degree by wind turbines situated offshore North Carolina. This would result in a loss of coastal radar monitoring for approximately 375 miles of the Virginia, North Carolina and South Carolina coasts. The exact extent of the impact will depend on the final installation location(s) of the turbines.

HF radars are used operationally by US Coast Guard for search and rescue and by NOAA for oil spill response and, by 31 March 2015, NOAA marine weather forecasting at Wakefield, VA and Morehead City, NC. All these applications require 24/7/365 operations unimpeded by external interference to the HF radar signal. More information on the radars is available at http://www.ioos.noaa.gov/hfradar.

NOS and the U.S. IOOS Program would like to work with BOEM to seek to minimize and, if possible, eliminate impacts to HF radar operations.

Should you have any questions on the HF radar, please contact Dr. Jack Harlan, Project Manager, HF Radar Ocean Remote Sensing in the U.S. IOOS Program Office at 240-478-9942 or jack.harlan@noaa.gov. Other questions on NOS programs can be directed to Glenn Boledovich, Chief of the NOS Policy Director & Chief of Policy and Constituent Affairs (301-713-3070 or Glenn.Boledovich@noaa.gov.

Attachment 2

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
http://sero.nmfs.noaa.gov

F/SER32:BZ

Program Manager
Office of Renewable Energy Programs
Bureau of Ocean Energy Management
381 Elden Street, HM 1328
Herndon, VA 20170-4817

FEB 2 3 2015

Dear Sir or Madam:

NOAA's National Marine Fisheries Service (NMFS), Southeast Regional Office, reviewed the Environmental Assessment (EA) produced by the Bureau of Ocean Energy Management (BOEM) entitled "Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina." The EA considers a number of geographic and non-geographic alternatives and evaluates the environmental and socioeconomic consequences, including potential user conflicts, associated with issuing leases and approving Site Assessment Plans (SAPs) relative to three Wind Energy Areas (WEAs) offshore North Carolina. The three WEAs are Wilmington-West, Wilmington-East, and Kitty Hawk. We provided comments to you in a January 17, 2013, letter in response to your Notice of Intent (NOI) to prepare the EA. NMFS now provides the following comments relative to the EA.

Essential Fish Habitat
NMFS appreciates the considerable good-faith efforts by BOEM to address issues raised by us over the last few years. We have no additional comments related to Essential Fish Habitat.

Threatened and Endangered Species/Marine Mammals
Our comments on the NOI and this EA concern potential impacts to North Atlantic right whales which are listed as endangered under the Endangered Species Act and as depleted under the Marine Mammal Protection Act. We thank BOEM for including alternatives that explicitly consider right whale protection.

NMFS is requesting BOEM change their choice of preferred alternative to Alternative B- leasing of Wilmington-East and Kitty Hawk WEAs in order to avoid potentially significant impacts to North Atlantic right whales. This is consistent with our January 17, 2013, letter which recommended that BOEM evaluate moving forward with Wilmington-East and Kitty Hawk WEAs, only, as reasonable alternatives in the EA. We further noted that BOEM (and applicants) will need to demonstrate that wind farm planning, construction, and operation activities will not:

1. Interfere with (obstruct) right whale migration along the mid-Atlantic.
2. Cause serious injury or mortality to right whales.
3. Cause migrating right whales to avoid the wind turbine fields and funnel into the Wilmington ship channel, resulting in an increased risk of vessel collision to right whales.

We also recommended simulating the acoustic properties of an operational wind turbine field prior to construction. We suggest all of this be demonstrated/determined prior to the Wilmington-West area being considered further for wind energy exploration or development.

Critical Habitat

On February 20, 2015, NMFS published a proposed rule to replace critical habitat for right whales in the North Atlantic with two new areas (80 FR 9314). The WEA Wilmington-West and a portion of WEA Wilmington-East are located within an area proposed for critical habitat for endangered North Atlantic right whales (Figure 1).

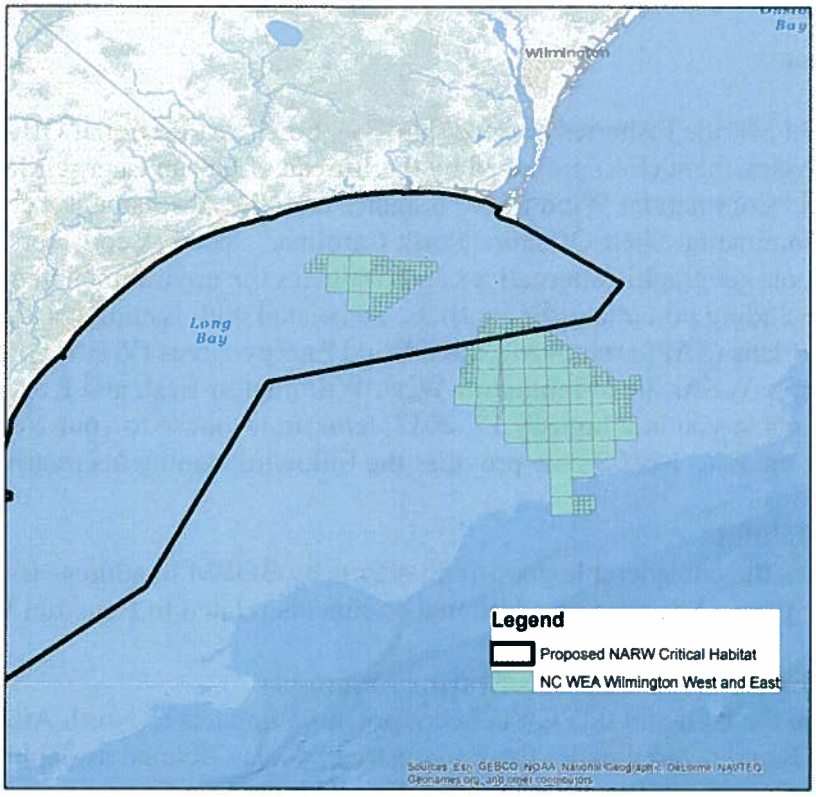

Figure 1. Illustration of proposed North Atlantic right whale critical habitat relative to North Carolina WEAs Wilmington-West and -East.

The physical features of right whale calving habitat that are essential to the conservation of the North Atlantic right whale are (1) calm sea surface conditions of Force 4 or less on the Beaufort Wind Scale; (2) sea surface temperatures from a minimum of 7 °C, and never more than 17 °C; and (3) water depths of 6 to 28 meters, where these features simultaneously co-occur over contiguous areas of at least 231 km^2 of ocean waters during the months of November through April. Installation and operation of offshore energy development facilities are not likely to negatively impact the preferred ranges of sea surface roughness, sea surface temperatures, or water depths, in that it will not result in lowering or raising the available value ranges for these features. However, installation and operation of these technologies may fragment the large, contiguous areas containing the optimum ranges of all the essential features that are necessary for right whale calving and rearing.

Because the Wilmington-West area is within an area important to right whales and it remains unclear as to whether wind turbine fields will interfere with right whale use of this calving habitat or their migration along the mid-Atlantic, we again recommend that leasing sites in and around the Wilmington-West WEA should be avoided. It seems a disservice to interested applicants to allow them to invest resources investigating the Wilmington-West area when it is not clear if the area is a suitable area for wind turbine fields or if wind turbine fields would interrupt critical right whale migratory behavior.

Thank you for considering our comments and your cooperation in conserving our protected resources. Questions or comments related to threatened and endangered species/marine mammals should be directed to the attention of Ms. Barb Zoodsma at 2382 Sadler Road, Suite #5 Fernandina Beach, FL 32034, or at (904) 321-2806.

Sincerely,

Roy E. Crabtree, Ph.D.
Regional Administrator

cc: F/SER-Amendola, Blough, Silverman
F/SER3 - Bernhart, Zoodsma
F/SER4 - Fay
F - Leathery, Holmes
PPI-Kokkinakis
NOS – Holmes, Gange