Mr. James F. Bennett, Chief  
Office of Renewable Energy  
Bureau of Ocean Energy Management  
45600 Woodland Road  
Sterling, Virginia 20166

Dear Mr. Bennett:

The Marine Mammal Commission (the Commission), in consultation with its Committee of Scientific Advisors on Marine Mammals, provides the following comments on the Bureau of Ocean Energy Management’s (BOEM) request for public comments to prepare a supplemental environmental assessment for commercial wind lease issuance and site assessment activities at the Wilmington East Wind Energy Area (WEA) off North Carolina. The Commission previously commented on BOEM’s draft environmental assessment for commercial wind energy leasing and site assessment activities off North Carolina (see letter of 23 February 2015), which was issued as revised in September 2015. The Commission also participated in BOEM’s meeting of the Intergovernmental Renewable Energy Task Force for Carolina Long Bay on 21 July 2021 as a Task Force member.

Right whale critical habitat and the proposed lease area

The southeastern United States provides the only known calving habitat for North Atlantic right whales. The National Marine Fisheries Service (NMFS) identified protection of calving areas as a primary conservation objective for the species when it proposed an expansion of critical habitat in 2015 to include waters off northern Georgia, South Carolina, and North Carolina up to Cape Fear (80 Fed. Reg. 9314). Those areas were determined by NMFS to meet the criteria outlined in section 4(b)(2) of the Endangered Species Act as being essential to conservation of the species and therefore requiring special management consideration (81 Fed. Reg. 4838).

In its final rule, NMFS determined that the essential features of right whale calving habitat included the following—

- Calm seas with surface conditions of Force 4 or less on the Beaufort Wind Scale
- Sea surface temperatures from 70 to 17°C
- Water depths of 6 to 28 meters.

Those features occur in coastal waters between Cape Canaveral, Florida, and Cape Fear, North Carolina, from November through April. In its responses to comments on the proposed critical habitat, and specifically the potential impacts of wind energy development on females and calves, NMFS identified wind energy development as a reason that the essential features of right whale critical habitat may require special management considerations and protection (80 Fed. Reg. 4853). NMFS noted that wind installations in critical habitat have the potential to fragment large, contiguous areas of essential features, thereby diminishing their suitability for calving (80 Fed. Reg.
NMFS encouraged Federal agencies and applicants whose actions may affect critical habitat features to consider and address concerns regarding those features in the early planning stages of their proposed actions.

The Wilmington East WEA (Lease OCS-A 0545) is located 15 nmi (27.8 km) from shore (Cape Fear) and extends 18 nmi (33.3 km) in a southeasterly direction at its widest point. It consists of approximately 25 OCS blocks and includes approximately 133,591 acres. Its northernmost blocks (which consist of parts of Outer Continental Shelf (OCS) Lease Blocks 6388, 6437, 6438, 6401, and 6402) overlap with designated North Atlantic right whale critical habitat. Although the area of overlap is small, activities in the leasing areas could impact right whale females and calves through disturbance or diversion away from energy development areas, thereby limiting their ability to select areas that provide the dynamic range of essential features that NMFS has determined are necessary for successful calving. The Commission believes that limiting the potential for adverse impacts on right whales and their habitat is a necessary requirement for any energy development activities taking place in or adjacent to right whale critical habitat. Potential adverse impacts can be addressed, in part, by implementing seasonal restrictions or other mitigation measures, discussed further herein, for activities that may disturb females and calves when they are reasonably expected to occur in the WEA.

BOEM is not considering the inclusion of the Wilmington West WEA in its analyses or any near-term proposed lease sales. The Commission supports BOEM's decision not to include the Wilmington West WEA in any proposed lease sales due to the overlap of that entire area with critical habitat for North Atlantic right whales.

**Recent changes in right whale status and distribution**

Right whales have declined significantly in abundance since 2010 (Pace et al. 2017, Pettis et al. 2020). That decline has been attributed to an increase in human-caused mortality (Davies and Brilliant 2019, Sharp et al. 2019), a decline in abundance of prey species in the Gulf of Maine and Bay of Fundy (Davies et al. 2019, Record et al. 2019), and a decrease in calf recruitment (Meyer-Gutbrod et al. 2021). Efforts are underway in the United States and Canada to mitigate right whale entanglements and vessel strikes (Davies and Brilliant 2019, Moore et al. 2021). However, no options are available at present to slow the climate-driven regime change that is causing the summer and fall distribution of right whales to change, including their increasing use of the Gulf of St. Lawrence for foraging (Meyer-Gutbrod et al. 2021). The lack of access to sufficient prey of the kind needed to recharge the energy stores of adult female right whales appears to be a key driver for the observed decline in calving rates since 2010 (Gavrilchuk et al. 2021).

The shift in distribution, inadequate prey availability, and increased mortality have made the mitigation of threats and monitoring of right whales in their calving habitat increasingly important (Gowan et al. 2019). Significant effort has been devoted to monitoring the occurrence of right whales in their southeastern U.S. calving areas, identifying individual whales, and tracking their arrival and departure dates. Those studies have shown that calving females appear to stagger their arrival and departure and stay longer in the southeast than non-calving females, males, and juveniles (Krzystan et al. 2018). Sightings are primarily made in aerial surveys conducted from November through April, with most of the survey effort in the core calving area off the Florida-Georgia border (Gowan et al. 2019). Although those surveys appear at present to encompass the earliest arrival and
latest departure dates, shifts in timing of arrivals and departures of whales may be missed. Visual surveys are critical for identifying individual females to determine key parameters such as age at first reproduction and inter-birth intervals (Gowan et al. 2019). However, there has been a dramatic decrease in the number of whales that migrate to the southeastern United States in recent years, putting aerial survey observers at considerable risk to collect sightings data from fewer detections. An expert working group established by NMFS to review right whale monitoring and surveillance programs recommended continued estimation of calf production, “with effort adjusted appropriately to achieve total enumeration without excessive expenditure of survey resources” (Oleson et al. 2020). The use of alternative survey strategies, such as passive acoustic monitoring, has been recommended to ensure that right whale presence is detected and appropriate management measures are implemented (Gowan et al. 2019, Pettis et al. 2020). Implementation of a permanent acoustic monitoring program to include migratory and calving areas was recommended by the right whale expert working group (Oleson et al. 2020). The Commission recommends that BOEM (1) include an update of all available right whale sightings and acoustic data from the southeastern United States in the supplemental environmental assessment and (2) continue to work with NMFS, the North Atlantic Right Whale Consortium, the state of North Carolina, and wind energy developers to collect information on the occurrence and demographics of right whales in the Wilmington East WEA using an integrated visual and acoustic survey approach, at an appropriate level of monitoring given the dramatic shift in right whale distribution in recent years.

Minimizing impacts on right whales

The Commission reviewed the draft lease provided to the Intergovernmental Renewable Energy Task Force prior to its July 2021 meeting, and noted that survey vessels would be allowed to operate in the Wilmington East lease area during the right whale calving period, from November through April, albeit with vessel speed restrictions. Vessel strikes are a primary cause of right whale mortality, despite vessel speed restrictions in seasonal and dynamic management areas (NMFS 2020), and calves are particularly susceptible to vessel strikes. Given the precarious status of the right whale population, the importance of successful reproduction for continued existence of the species, and the potential overlap of right whale females and calves with survey vessels operating in the Wilmington East WEA, the Commission recommends that BOEM include in the supplemental environmental assessment an alternative that would prohibit site assessment activities in the North Carolina Wilmington East lease area during the 1 November to 30 April timeframe. This recommendation is consistent with previous Commission recommendations regarding leasing and site assessment activities in North Carolina waters (see letters dated 7 March 2013 and 23 February 2015).

The Commission hopes these comments will be helpful to BOEM in meeting its responsibilities under the National Environmental Policy Act.

Sincerely,

Peter O. Thomas, Ph.D.
Executive Director
References


