

February 23, 2015

Program Manager
Office of Renewable Energy
Bureau of Ocean Energy Management
381 Elden Street, HM1328
Herndon, Virginia 20170-4817

**Re: Comments on Commercial Wind Lease Issuance and Site Assessment
Activities on the Atlantic Outer Continental Shelf Offshore North Carolina
Environmental Assessment, Docket ID: BOEM-2015-0001-0001**

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Dear Office of Renewable Energy,

The Southern Alliance for Clean Energy (SACE) is a regional organization that promotes responsible energy choices that create global warming solutions and ensure clean, safe and healthy communities throughout the Southeast. We welcome this opportunity to engage in a thoughtful discussion on offshore energy and thank you for your willingness to accept comments and incorporate feedback in the leasing process for wind energy offshore North Carolina. SACE would like to voice our support for offshore wind energy and the Bureau of Ocean Energy Management's (BOEM) initiatives in North Carolina, particularly the issuance of this environmental assessment (EA).

The Southeastern U.S. coast is home to some of the best offshore wind resources in the world. This abundant resource represents a huge economic and environmental opportunity over the next several decades. The relatively shallow offshore waters in our region are ideal for developing wind farms. In addition to increasing our energy security, development of offshore wind energy will diversify our region's energy portfolio, promote local economic growth, reduce global warming pollution and conserve water resources for our region. Offshore wind energy from the Southeast can help our region achieve the Department of Energy's national vision of generating 20% of its electricity from wind power by the year 2030. Before our region can become home to offshore wind farms and a thriving center for wind innovation, important research needs to be completed and several barriers overcome. We respectfully submit the following suggestions to improve the permitting process for wind energy offshore North Carolina.

PRIORITIZE PROTECTION OF NORTH ATLANTIC RIGHT WHALES WITH SEASONAL MITIGATION MEASURES, RATHER THAN ADDITIONAL AREA EXCLUSION

Development of North Carolina's offshore wind resources must be done responsibly for the environment and economy. To this end, we believe BOEM must prioritize protection of the North Atlantic right whale and other marine mammals. We support BOEM's decision to prohibit pile driving during the six months encompassing peak right whale migration season in the proposed action scenario (Alternative A), as well as in Alternatives B and C.

We also support the additional mitigation measure of seasonal prohibition of high resolution geophysical and geotechnical surveys during the height of right whale seasonal migration (Alternative C).

We do not, however, believe that excluding Wilmington West Wind Energy Area (WEA) from leasing at the current time would be wise.

Considerations of environmental mitigation measures must be placed within the context of the scope of the proposed action, which for this environmental assessment is the issuance of leases for site characterization and assessment activities.

With the inclusion of mitigation measures articulated in the Standard Operating Conditions (SOCs), including vessel strike avoidance measures including speed restrictions, visibility requirements and protected-species observers (PSOs), and in addition the seasonal prohibitions of pile driving and geologic and geophysical surveys, site assessment and characterization activities as laid out in the EA pose negligible risk to right whales, other marine mammals, and sea turtles.

Excluding additional areas from consideration for leasing would be a detriment to responsible offshore wind energy development.

This is true more so considering the extensive area excluded from consideration for leasing in the Notice of Intent for Prepare an Environmental Assessment¹ and Call for Information and Nominations²—which excluded Areas of Interest 3 and 4, even after significant stakeholder engagement in the form of the North Carolina Renewable Energy Task Force—and the Announcement of Area Identification³—which significantly reduced the size of Kitty Hawk WEA and Wilmington East WEA and reduced Wilmington West WEA to a lesser extent.

¹ Bureau of Ocean Energy Management (Dec. 13, 2012). *Commercial Wind Leasing and Site Assessment Activities on the Atlantic Outer Continental Shelf (OCS) Offshore North Carolina*. [http://www.boem.gov/uploadedFiles/BOEM/Renewable_Energy_Program/State_Activities/NC%20NOI%202012-30091.pdf].

² Bureau of Ocean Energy Management (Dec. 13, 2012). *Commercial Leasing for Wind Power on the Outer Continental Shelf Offshore North Carolina—Call for Information and Nominations (Call)*. [http://www.boem.gov/uploadedFiles/BOEM/Renewable_Energy_Program/State_Activities/North%20Carolina%20Call%20Docket%20No.%20BOEM-2012-0088.pdf].

³ Bureau of Ocean Energy Management (August 7, 2014). *Announcement of Area Identification; Commercial Wind Energy Leasing on the Outer Continental Shelf Offshore North Carolina*. [http://www.boem.gov/NC_AreaID_Announcement].

The reasons cited in the environmental assessment for potentially removing Wilmington West from consideration for leasing, such as in Alternative B, seem to be primarily founded upon concerns regarding North Atlantic right whale habitat, specifically those articulated by the letter from the National Oceanic and Atmospheric Administration (NOAA), sent January 17, 2013 in response to BOEM's Notice of Intent to Prepare an EA.⁴ The concerns presented by NOAA are valid, however premature considering the scope of this EA. Exclusion of any additional area for site characterization and assessment activities is unnecessary, considering this EA covers just the planning and analysis phase of the leasing process, with the most advanced allowed action being installation of relatively benign site assessment equipment such as meteorological towers or buoys.

It is important to highlight and understand that the action proposed by this EA and successful issuance of a lease does not automatically permit a lessee to install site assessment equipment, such as a meteorological tower or buoy, nor install wind turbines. As required by BOEM, these further actions will be contingent upon approval of a site assessment plan (SAP) and a construction and operations plan (COP), each of which will be subject to additional environmental reviews, including verification of NEPA analysis for all activities proposed in the SAP, and a separate site- and project-specific NEPA analysis for the COP. All of these opportunities for environmental review will help guide project development to protect against impacts such as those noted by NOAA.

REEVALUATE THE RESIZING OF KITTY HAWK WIND ENERGY AREA

We additionally request BOEM to reevaluate the resizing of the proposed Kitty Hawk Wind Energy Area. BOEM's elimination of large portions of the WEA in the Announcement of Area Identification⁵ due to viewshed concerns and potential vessel traffic conflicts significantly reduces the economic viability of research and potential future development. The WEA was pushed to 24 nautical miles from shore at its closest point at the northern end of the WEA, drifting to 33.7 nautical miles from shore at its closest point to shore on the southern end of the WEA. The depth of the WEA now ranges from 31 to 38 meters of water depth. The distance from shore and water depth compromise the economic viability of researching and developing this area in the near term. We encourage BOEM to work further with the National Park Service, the Town of Kitty Hawk, and potential wind farm developers to find setback distances that address viewshed concerns but remain attractive for research and potential future development.

Furthermore, this EA deals only with site characterization and assessment activities, not the installation phase of wind farms. Since SACE is unaware of any visualization study that evaluates viewshed considerations only for meteorological towers or buoys (or other site assessment data collection configurations), and since the EA concludes that lighting impacts from the proposed

⁴ Bureau of Ocean Energy Management (January 22, 2015). *Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina Environmental Assessment*, p. 2-5. [http://www.boem.gov/BOEM_NC_EA_For_Publication].

⁵ Bureau of Ocean Energy Management (August 7, 2014). *Announcement of Area Identification; Commercial Wind Energy Leasing on the Outer Continental Shelf Offshore North Carolina*. [http://www.boem.gov/NC_AreaID_Announcement].

action (Alternative A) would be negligible and indistinguishable from existing vessel traffic,⁶ we deem viewshed concerns for the data collection phase of offshore wind development to be premature.

Premature aesthetic concerns should not preempt data collection from interested offshore wind development companies. Since distance to shore directly relates to site assessment costs, moving site assessment activities further offshore will increase the costs of research and increase response time in the event of a catastrophic loss of life or property. Because current aesthetic concerns might be mitigated by a future private developer's stakeholder outreach, communications efforts or turbine selection and array design, any sort of a viewshed buffer should be considered imprudent at this stage in the process.

Excluding areas for research, based solely on subjective, aesthetic concerns about potential future wind farm development is hasty and unnecessary.

As we recommended in our comments to BOEM in response to the Notice of Intent to Prepare an Environmental Assessment,⁷ we urge BOEM to investigate advanced turbine lighting strategies, which may significantly mitigate aesthetic concerns associated with having the Kitty Hawk WEA closer to shore than 24-33 nautical miles. Furthermore, advanced lighting strategies may help reduce avian mortality. We recommend that BOEM evaluate turbine and met tower lighting strategies that both minimize aesthetic concerns and improve protections for migratory bird species. Such strategies may include radar-sensing audio/visual warning systems (like the Obstacle Collision Avoidance System⁸), LED rapid-discharge lights, synchronous lighting, visibility/fog sensors⁹ or other technologies and techniques to minimize light impacts.

Regarding vessel traffic, there may be an opportunity to bring the Kitty Hawk WEA closer to shore without excessive use conflict with vessel traffic by utilizing the apparent gap between nearshore barge traffic and the main shipping traffic farther offshore. The EA's marine vessel density chart¹⁰ shows a gap between the nearshore barge traffic and the main shipping traffic, which appears to be 22-24 nautical miles off of Kill Devil Hills. It appears there is an area between Currituck and Kill Devil Hills approximately 15-20 nautical miles offshore that is in between the nearshore and main offshore shipping traffic with only light vessel traffic. This area between the shipping lanes could be expanded eastward by adjusting the main shipping channel to the east. We urge BOEM to reexamine an area between 15 and 24 nautical miles offshore to fully consider whether the wind energy area could be expanded toward the shore and into shallower water.

⁶ Bureau of Ocean Energy Management (January 22, 2015). *Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina Environmental Assessment*, p. 4-101. [http://www.boem.gov/BOEM_NC_EA_For_Publication].

⁷ Southern Alliance for Clean Energy (March 7, 2013). *Comments on North Carolina EA*. [<http://www.regulations.gov/#!documentDetail;D=BOEM-2012-0090-0020>].

⁸ State of Vermont Public Service Board (May 31, 2011). Docket No. 7628. [<http://psb.vermont.gov/sites/psb/files/orders/2011/7628FinalOrder%20CPG%20Attachment%20A-2.pdf>].

⁹ Biral. "Wind Energy." [<http://www.biral.com/windenergy>].

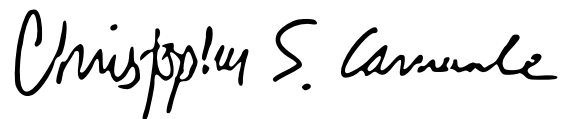
¹⁰ Bureau of Ocean Energy Management (January 22, 2015). *Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina Environmental Assessment*, p. 4-70. [http://www.boem.gov/BOEM_NC_EA_For_Publication].

BETTER ARTICULATE PERMISSIONS ASSOCIATED WITH DECOMMISSIONING ACTIVITY

We do feel that one area that deserves more articulation in this EA is in regards to permissions granted for potential decommissioning of site assessment equipment. The EA makes brief mention of the seasonality of decommissioning activity in its Assumptions for Reasonably Foreseeable Scenario: “Expected months that meteorological tower installation and decommissioning, and site assessment activities would occur: April to August,” but it is not clear if decommissioning activity outside of these months would be prohibited.¹¹ Greater clarity on this subject would help evaluate potential environmental impacts and promote better understanding among potential stakeholders.

Thank you for the opportunity to comment.

Respectfully submitted,

A handwritten signature in black ink that reads "Christopher S. Carnevale". The signature is written in a cursive, slightly slanted style.

Chris Carnevale
Coastal Climate & Energy Coordinator
Southern Alliance for Clean Energy

¹¹ Bureau of Ocean Energy Management (January 22, 2015). *Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf Offshore North Carolina Environmental Assessment*, p. 3-1. [http://www.boem.gov/BOEM_NC_EA_For_Publication].