

Bureau of Ocean Energy Management South Carolina Offshore Renewable Energy Task Force

September 9, 2015

Meeting Summary

U.S. Department of Interior
Bureau of Ocean Energy Management
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I. Introduction

The Bureau of Ocean Energy Management (BOEM) convened the fourth in-person meeting of the South Carolina Renewable Energy Task Force at the Litchfield Beach and Golf Resort in Pawleys Island, South Carolina on September 9, 2015. The purpose of the meeting was to: (1) provide updates on state and federal activities related to planning for offshore wind energy development in the Outer Continental Shelf (OCS) off of South Carolina, and (2) obtain feedback on the proposed Call Area boundaries.

The Task Force meeting included several presentations, each followed by discussion with Task Force members.¹ These presentations included the following:

- Welcoming remarks by James Bennett, Chief for the Office of Renewable Energy Programs at BOEM and Trish Jerman, Program Manager of the South Carolina Energy Office
- Task Force update and review of the proposed Call Areas by Casey Reeves, Project Coordinator at BOEM
- Background on Notice of Intent and Environmental Assessment by Brian Krevor, Environmental Protection Specialist at BOEM
- Overview of submerged historic landscapes study and other relevant data collection by Paul Gayes, Director of the School of Coastal and Marine Systems Science at Coastal Carolina University
- Closing remarks by Casey Reeves and James Bennett

The meeting was followed by a public session.

II. Meeting Participants

¹ Presentations from the meeting are available on BOEM's South Carolina webpage: <http://www.boem.gov/Fourth-South-Carolina-Task-Force-Meeting/>

The following is a list of attendees from the September 9, 2015, BOEM South Carolina Interagency Task Force meeting.

Federal, State, Local, NGO, and Tribal Participants

1. James Bennett, Bureau of Ocean Energy Management
2. Zachary Binhgim, U.S. Coast Guard
3. Jeff Browning, Bureau of Ocean Energy Management
4. Mark A. Caldwell, U.S. Fish and Wildlife Service (USFWS), Region 4
5. John Downing, U.S. Coast Guard
6. Greg Duckworth, South Carolina House of Representatives
7. Alex Gray, Marine Corps Installations East - Camp Lejeune, NC
8. Mary Greene, Bureau of Ocean Energy Management
9. Cheri Hunter, Bureau of Safety and Environmental Enforcement
10. Elizabeth Johnson, State Historic Preservation Office
11. Mark Jordan, North Myrtle Beach Chamber of Commerce
12. Brian Krevor, Bureau of Ocean Energy Management
13. Paul Lehmann, U.S. Coast Guard
14. Bob Middleton, Bureau of Safety and Environmental Enforcement
15. Andrew Mims, Office of Congressman Tom Rice
16. Barbara Neale, SC DHEC OCRM
17. Bob Perry, South Carolina Department of Natural Resources (DNR)
18. Aaron Pope, City of Folly Beach
19. Casey Reeves, Bureau of Ocean Energy Management
20. Aaron Rucker, City of North Myrtle Beach
21. Chris Ruleman, U.S. Coast Guard
22. Steve Spivey, Santee Cooper
23. John Stanton, U.S. Fish and Wildlife Service (USFWS), Region 4
24. Bob Van Dolah, South Carolina Department of Natural Resources (DNR)
25. Beth Walls, Environmental Protection Agency
26. Pace Wilbur, National Oceanic and Atmospheric Administration (NOAA)
27. Carolee Williams, City of Charleston

Public Observers

1. Dennis Allen, SC Birch Harrel Lab
2. Marie Baldwin, North Strand Coastal Wind
3. Daniel Brown, SCIAA
4. Chris Carnevale, Southern Alliance for Clean Energy
5. Nancy Cove, Coastal Conservation League
6. Ryan Fabbri, Town of Pawleys Island
7. Paul Gayes, Coastal Carolina University
8. Pamela Martin, Coastal Carolina University
9. Ian McLaren
10. Paul Rich, US Wind, Inc
11. James Trumbull, HDR (for Michael Murphy)
12. Jim Watkins, SODA
13. Karen Yanioga, SODA

Facilitation Team

1. Catherine Morris, Consensus Building Institute
2. Ronee Penoi, Consensus Building Institute

III. Key Discussion Points

Mr. James Bennett, Chief for the Office of Renewable Energy Programs, BOEM, welcomed the Task Force. He noted that the Call for Information on development of offshore wind energy in the outer continental shelf of South Carolina is part of a larger effort of the administration to increase renewable energy deployment in the U.S. He stated that BOEM is in the very early stages of the wind leasing process in South Carolina, one that relies on input from this intergovernmental Task Force. He emphasized that the focus of the meeting would be on the “Planning and Analysis” stage of the wind energy development process, with the Call for Information being the first of five steps within that stage. He outlined the four purposes of the meeting as being to: 1) review the Task Force's progress and past meetings, 2) describe the four geographic areas under consideration for future offshore wind development and analysis, 3) provide an overview of the many considerations that will affect the process, and 4) describe future planned activities.

Ms. Trish Jerman, Program Manager at the SC Energy Office, thanked everyone for their attendance at the meeting. She explained that she would be representing the Energy Office, as they are undergoing reorganization and have not yet replaced the State designee. She highlighted that she is also part of the State Regulatory Task Force, which has been meeting since 2009, and shared that many attendees in the room were members of that Task Force. She concluded by noting that South Carolina has been thinking about wind for a long time (with the SC legislature first conducting a wind study in 2009), and given this, the state is eager to move forward.

Ms. Catherine Morris of the Consensus Building Institute (CBI) was introduced as the meeting facilitator supported by Ms. Ronee Penoi, CBI project coordinator. Ms. Morris reviewed the agenda and meeting protocols, and encouraged Task Force members to stay for the afternoon's public comment session. She then asked the Task Force members to introduce themselves.

A) Status Update and Overview of Call Area

Mr. Casey Reeves, Project Coordinator with BOEM, reviewed the past benchmarks and activities of the Task Force since its inception in 2012 and shared the program's philosophy. He emphasized that information provided by the stakeholders on the Task Force is very important to the planning process. Mr. Reeves' presentation included the following points:

- A data portal - the SC GIS Data Portal - was built with the goal of creating a shared data sets and resources that would be available to Task Force members and BOEM. This portal includes data provided by both Task Force members and BOEM.
- The goal of today's meeting is to review the Call for Information, report out to the Task Force how BOEM has been responding to information and comments received over the last year, and gain clarity on realistic time frames for agency processes and activities going forward. The wind energy development process is a long and deliberative process, and BOEM intends to move forward responsibly and with all available relevant information.

Mr. Reeves then moved on to review the Call for Information and Nominations, the first step in the planning and analysis phase of BOEM's wind energy planning process, as well as the specific areas outlined in the Call. Mr. Reeves presentation included the following points:

- The Call is a notice published in the Federal Register and a way to assimilate interest from industry and relevant information from stakeholders (including the public and NGOs) to inform BOEM's future decisions. It is not a decision to lease or a comprehensive environmental analysis.
- The four areas included in the Call are Grand Strand, Cape Romain, Charleston, and Wyah.
- The Call incorporates information received from Fred Engel at the Department of Defense and Emile Bernard of the U.S. Coast Guard, who provided information on their operational areas, high near-shore use and high vessel traffic areas, as well as other areas of interest to the Department of Defense and Coast Guard in conducting their operations and programs.
- BOEM has also removed from the Call Area certain critical habitat areas and artificial reefs.
- Once the Call is published, BOEM will assimilate additional information and determine interest in these areas, and will continue stakeholder outreach, data gathering, and public meetings.
- BOEM's decision making process is based on transparency, centers around utilizing sound reasoning and science, and takes into consideration all available information and stakeholder input. Task Force members are encouraged not to assume that BOEM has certain information; it is important to share whatever relevant information you have available. All the decisions that will be made going forward will be open and deliberate, with the end goal being efficient, safe, and environmentally sound wind energy development offshore South Carolina.

Members of the Task Force asked several questions, including the following (responses are in italics):

- Ms. Jerman asked if an industry representative could approach BOEM and ask to open up leasing for a particular tract? *Mr. Reeves replied that there is the opportunity for a developer to do the initial screening on their own, identify a site*

they would like to move forward with, and submit an unsolicited request. Similarly, if BOEM did not receive a nomination in response to the Call, they could receive an unsolicited application at a later date. Mr. Bennett clarified that such an unsolicited proposal would initiate the same rigorous evaluative process as has been previously described.

- Ms. Jerman asked, if part of the Call Area is removed, when it might come up again for consideration. *Mr. Reeves responded that it is difficult to forecast those decisions until BOEM receives responses and more information from the Call.*

Mr. Brian Krevor, Environmental Protection Specialist at BOEM, discussed BOEM's Notice of Intent to prepare an Environmental Assessment, as well as an overview of BOEM's environmental review process. Mr. Krevor's presentation included the following points:

- The Notice of Intent (NOI) to prepare an Environmental Assessment (EA) will be published concurrently with the Call in the Federal Register. The NOI informs the public and solicits input on outstanding issues or data gaps. The NOI begins the environmental review process. The EA is a concise public document that provides sufficient evidence and analysis to determine whether to prepare an Environmental Impact Statement (EIS).
- The proposed actions considered in the EA will include lease issuance and the foreseeable consequences of that lease issuance, such as associated site characterization surveys and subsequent site assessment activities. Installation, operation, and decommissioning of a commercial wind energy facility will not be considered as part of the EA. Alternatives that may be considered in the EA include geographic changes (e.g. going to a different area, removing some or all of any Call Area, etc.), seasonal restrictions (e.g. adjusting timing of surveys during migrations) and no-action taken. The EA may also result in restrictions or mitigation measures placed on the site assessment process.
- Impact-producing actions considered in the EA will include vessel traffic or collisions, noise, bottom disturbance, vessel emissions and discharges, lighting, or visual and aesthetic interference. Impacts on physical, biological, and socioeconomic resources will be considered.
- BOEM has already eliminated areas from the Call that have clear environmental issues. For instance, areas of high bird density were considered. Previous studies showed that bird density dropped off at 6 nautical miles; however, a recent study between BOEM and NOAA gave a more nuanced view. Now, everything is eliminated that has more than 4 birds per 1600 m by 1600 m block.
- The Call is an opportunity to gain needed additional information. BOEM is specifically looking for more information on the Proposed North Atlantic Right Whale Critical Habitat expansion, visual impacts, the Gullah Geechee Cultural Heritage Corridor, and other biological resources.
- Specific comments that include distances necessary to avoid conflicts, data and/or specific reasons for concerns about a given Call Area are encouraged and very helpful.

B) BOEM Study of Ocean Bottom

Mr. Paul Gayes, Director of the School of Coastal and Marine System Science at Coastal Carolina University, presented an overview of a joint study between BOEM and Coastal Carolina on geophysical mapping and identification of paleolandscapes and historic shipwrecks offshore South Carolina. Mr. Gayes's presentation also included a number of studies working towards educating decision-makers or reducing uncertainties facing developing industries in order to drive down exploration, design, and operational costs. Mr. Gayes's presentation included the following points:

- The BOEM study was an extension of previous mapping completed by USGS out to 5 nautical miles. In this study, geophysical mapping was completed for areas 11-16 miles offshore. Tools for the geophysical mapping included multi-beam sonar, CHIRP sub-bottom sonar, side-scan sonar, and a magnetometer.
- With these tools it was possible to obtain useful data such as multi-beam imagery of an artificial reef and magnetometer data of an artifact that suggests areas that might be of archeological interest. With CHIRP, it was possible to identify older substrate outcrops, the thickness of sediment cover, and geologic characteristics such as underwater river valleys.
- Coastal Carolina and BOEM also partnered with NOAA fisheries to test their habitat mapping model. The results showed that in some places where NOAA's mapping model indicated there would be a lot of habitat and marine life, there was none. This is an example of how, while the big picture is helpful, there is a need for higher resolution in these specific discussions.
- Mr. Gayes provided an overview of four other studies directed at the wind industry. One study by the Savannah River National Laboratory, NREL, MMI Engineering, and Coastal Carolina worked on advanced modeling and observations of wave forcing during high-energy events. The goal was to complete an observational campaign with buoys to understand what the forcing might be on wind turbine structures.
- There has been a great deal of research activity over the last 15 years, which will continue. Cooperation between government, universities, agencies, and the private sector will likely continue to yield information helpful to the decision-making process.

C) Discussion - Gathering input on proposed Call Area boundaries

Ms. Morris then asked the Task Force for questions and comments. She emphasized that this was a good opportunity to alert BOEM to any initial concerns. She provided the Task Force with a list of issues raised in the Call to remind them of where input would be beneficial.

Ms. Carolee Williams asked BOEM why the Charleston Call Area was included, as she recalled from previous mapping that it had been removed. Ms. Williams also noted that even though the area was not an area she was glad to see the area and did not see any concerns with the area and was glad to see an area offshore near Charleston where the

load and port infrastructure being considered. *Mr. Reeves responded that the Charleston area was de-conflicted previously and moving forward with the area into a Call was a product of conversations with the Task Force suggesting that areas with annual wind speeds over 8m/s that are not immediately conflicted should not be taken off the table and out of consideration. BOEM thought it best to remove only the areas conflicted from DOD and the Coast Guard assessments, artificial reefs and areas of high avian density north of Charleston where wind resources make them higher interest. By moving forward with this approach the Charleston, Wynyah and Cape Romain areas came back into play this way.*

Mr. John Stanton commented on the avian density research BOEM completed, and applauded the initial analysis. He added that there should be more information available from the USFWS in coming weeks, based on a large avian database, with bird survey data back from the 1970s, as well as data from newer technologies (tracking devices, GPS tracking for individual birds, etc.). He shared that there is very current information on migratory pathways, as well as information on birds of high concern. Wintering sea ducks are a concern for this area offshore South Carolina. *Mr. Reeves responded that he hopes that as information becomes available that it will be shared with BOEM, and reiterated that this is an iterative process. He clarified as well that it is most useful to receive information that is complete, rather than partial or in progress.*

Mr. Ryan Fabbri commented on behalf of the Mayor of Pawleys Island. He stated that the community does not want wind turbines sited within the viewshed of Pawleys Island. It is important that there be no visibility at any time of day or year. There are many historic structures on the island with historic value worth preserving. The viewshed is part of that historic value. Also, 70% of property dwellers rent their homes, and turbines could have a negative impact on tourism. *Mr. Reeves confirmed that BOEM had met on September 8th with the Mayor of Pawleys Island, and heard the same concerns. BOEM also aware of the potential for visual impacts and the concerns would be a part of the body of information that BOEM is considering. Ms. Carrier thanked Mr. Fabbri for his comment and for clearly articulating the reason for concern.*

Mr. Bob Perry asked when an examination of the shore-based grid would be performed to determine where power would come onshore, noting his concern for possible impacts on the Cape Romain National Wildlife Refuge(NWR). *Mr. Krevor responded that it would be completed much later in the process, once an operations plan was received. Right now, such a study would be speculative. Mr. Reeves added that BOEM jurisdiction to describe the areas included in the Call was limited to the OCS but the Call requests information on adjacent areas. BOEM is well aware that managing and leasing the OCS has the potential to impact adjacent areas specifically routes to shore. Mr. Reeves added that any potential future utility infrastructure across would be within the jurisdiction of the applicable land owner in the case impacts of easements across the Cape Romain NWR would be at the discretion of the USFWS which is not under BOEM's jurisdiction. However, it is a valuable question and consideration because interconnection to the terrestrial grid is essential to any project. Typically, when it comes time for transmission systems the onus is on the developer to site the cabling and secure all local, state and*

federal authorizations and each developer and the utilities they interconnect with play a large role in working out these challenges.

Mr. Caldwell commented that looking broadly at such a potential impacts could be within the scope of the EA, and could be required under NEPA. *Mr. Krevor disagreed, stating that specific project development and onshore connections are not part of the scope of the environmental assessment. When BOEM receives a project plan from a developer, that would initiate looking at impacts associated with the specific project. Impacts related to survey of areas, site characterization, etc. are the only actions considered in the EA at this time. Development could be 7-10 years away, when technology and options for interconnection could look very different.*

Mr. Bob Middleton asked for clarification as to whether the Public Service Commission or another agency has authority to approve the transmission lines coming ashore. Steve Spivey indicated that it is Santee Cooper's position that the PSC does not have jurisdiction. *Ms. Jerman and Ms. Barbara Neale clarified that transmission and distribution under 125 kilovolts is within the PSC's jurisdiction.*

Mr. Mark Jordan requested clarification about the Task Force's role or responsibility to nominate Call Areas. *Mr. Reeves clarified that the Call spells out what conditions industry needs to meet to nominate an area for development. Nominations of interest will come from industry, not from the Task Force. This meeting and the 45-day comment period are opportunities for BOEM to gather information from the Task Force, industry, and the public. Additional information will be welcome beyond that 45-day period as well.*

Ms. Williams asked whether it was possible to split a Call Area, specifically Cape Romain, based on information that certain areas were distinct and different. *Mr. Browning and Mr. Reeves clarified that if the differences had to do with economic feasibility, BOEM could not evaluate the areas based on that criterion. That would be the responsibility of the developer to do. Mr. Bennett added that BOEM would be receptive to hearing any information about a certain area being distinct and different based on environmental or other considerations.*

Mr. Perry cautioned the Task Force that in other instances transmission projects have had unintended consequences. He emphasized that how and where energy comes ashore is very important, especially as the South Atlantic Biosphere Reserve is nearby. *Mr. Krevor and Mr. Reeves responded that it is of great interest to BOEM to make sure there are not significant impacts on those lands. However, such considerations are far ahead of the current stage of the wind energy development process.*

Mr. Stanton reflected that he sensed some discomfort from others on the Task Force about the Call Areas as they are currently proposed. *Mr. Krevor clarified that the Call is an opportunity to receive more information, and this way the Call Areas can be refined based on that information.*

The Task Force had further discussion on the topic of viewshed. Mr. Krevor articulated that based on strict mathematics of the curvature of the Earth, 24 miles is past the point of visibility. However, given atmospheric condition or how far the eye can perceive something like a wind turbine, 20 miles is more reasonable, but this also varies based on site-specific conditions. Seasonal differences in visibility matter as well. Ms. Jerman weighed in that the statement from Mr. Fabbri was clear and helpful, and it could be helpful to receive a similar statement from the USFWS. *Mr. Krevor agreed, and clarified that a request to site turbines “beyond any possible line of sight” would potentially eliminate the Cape Romain Call Area (even though visibility would only happen 22% of the time). Given this, specific information is critical.*

The Task Force also discussed the NOAA proposed North Atlantic Right Whale Critical Habitat expansion. This proposed expansion could potentially impact much of the Grand Strand Call Area. *Mr. Krevor shared that BOEM is working with the protected species team at NOAA to determine what that would mean for Wind Energy Areas, and determine potential mitigation that could alleviate some concerns. No specific information was provided on what additional conditions would be developed if the critical habitat was expanded, but BOEM acknowledged that this information was included in the Call and would be further analyzed in future NEPA analysis, including but not limited to lease issuance and site characterization activities.*

Lastly, the Task Force discussed if any of the information received would be shared with those at BOEM that work on oil and gas, to ensure consistency. *Mr. Bennett clarified that this process was for wind energy only. While there is definitely a need to coordinate consistent use of information, there is no presumption of compatibility or incompatibility. Also, most proposals for oil and gas are beyond 50 nautical miles, so there is likely no overlap. In response to a question from the Coast Guard about the Call Areas being approved for other renewable energy activities beyond wind, such as marine hydrokinetics, ocean current or wave energy devices, Mr. Reeves clarified that this timeline and process are for wind only.*

IV. Meeting Wrap Up

Ms. Morris thanked everyone for the discussion, and expressed that it was useful to hear the issues that were of most concern to the Task Force. She shared that she hopes everyone has a better sense of the next steps in BOEM's process. Once the Call and NOI are published (the Task Force will be notified a few days beforehand), there will be a 45-day period for comment.

Mr. Reeves thanked everyone for the open dialogue and discussion coming out of the Task Force meeting, which was in-depth and specific in its concerns.

Mr. Bennett emphasized that everyone asking questions was important and key to making sure BOEM has all the information needed. He then thanked everyone for expressing the issues that BOEM needs to address in moving forward.

The formal Task Force meeting was adjourned at 3:45pm.

Interested parties were asked to contact Casey Reeves by phone (703.787.1671) or via e-mail (casey.reeves@boem.gov) with any questions, comments, or concerns regarding the content of this meeting summary.

V. Public Session

Four participants in the public session offered comments and posed questions. Their comments are summarized below:

Mr. Jim Watkins of **Stop Oil Drilling in the Atlantic (SODA)**, a group with over 1,000 members and a citizen of Pawleys Island thanked the Task Force for their work on wind energy development offshore South Carolina in the areas. As an engineer by trade he hopes someone is focusing on helping the public understand wind's role in energy production, and expressed his opinion that the future is in renewable energy, not in oil. He stated that South Carolina is well-positioned for renewable energy and hopes to see the development occur in the near future..

Mr. Ron Watts, **Mayor of Sunset Beach, North Carolina**, stated that he would not like to see wind turbines offshore Sunset Beach. His town has asked that they be moved out of the viewshed, at least 15 miles offshore. He stated that Sunset Beach would see more of the Grand Strand area than Wilmington would. He also expressed that there was a need to coordinate these efforts with consideration of offshore oil development impacts. The local jurisdiction has been to 7-8 hearings, and he is hopeful that people are talking to each other. He stated his concern that economic benefits for Sunset Beach from offshore wind development were not well documented and may be overstated, and that transmission lines are a concern. He thanked the Task Force for their efforts, and concluded with a request that the Grand Strand Call Area be moved further offshore.

Chris Carnevale from **Southern Alliance for Clean Energy** asked about the Charleston Call Area and the factors involved in moving it. He asked whether it could be moved closer to shore. Mr. Reeves responded that the conflict was the port of Charleston, and the vessel traffic north/south and into the port. In the Coast Guard's assessment, it was named a high-density vessel traffic area. DOD areas border it on the east, and it is bounded on SW and NW by high vessel traffic. Mr. Carnevale responded that he is glad to see in Grand Strand that BOEM is allowing the process to play out and not preclude areas without significant justification for removal. He stated he is glad the area is approaching the state submerged lands act boundary at the 3 nautical mile line.

Ms. Jen Banks from the **Southeastern Wind Coalition** asked whether the area would change significantly based on these first initial 10 days of comments from the Task Force. She also asked whether industry could come back to some of the areas that were removed. Ms. Banks also noted that it was helpful that Coast Guard consultation was already complete, and hoped that would contribute to not seeing a huge change between the Call Area and what happens later. Ms. Banks concluded by encouraging the Task

Force to reiterate the need for input at every step, as in North Carolina many things happened without the full Task Force's understanding. Mr. Reeves responded that BOEMs decisions are based on information received from stakeholders and that nominations and information received will be the weighing factors as to whether some of the areas would be off the table. Mr. Krevor added that if impacts are less than anticipated, areas closer to shore could be reconsidered. With regard to the Coast Guard consultations, Mr. Reeves responded that while they have removed high vessel density areas, BOEM will continue coordination with the USCG throughout the development of any installations and will still need to look at individual foundations and structures and additional hazards to navigation with both the Coast Guard and the Army Corps of Engineers.