

Wind Energy Production Farms Feasibility Study Committee Meeting #3
Minutes
September 21, 2009
1:00 – 4:00 PM
209 Gressette Office Building
Columbia, SC 29201

I. Introductions

Committee Members in Attendance:

Senator Paul Campbell: Chair
Senator Daniel Verdin
Representative Nelson Hardwick
Representative Mac Toole
Hamilton Davis: Coastal Conservation League
John Boyd: Haynsworth, Sinkler, and Boyd Law Firm
Roger Schonewald: GE Energy
Robert Leitner: SC Institute of Energy Studies
Earl Hunter: Commissioner, SCDHEC

II. Review and Discussion of Draft Report

Toole and Schonewald suggested that the report include case studies from other states in a table format of what has been done to date. Additionally, committee members wanted to highlight the quantity of new wind being installed around the country.

Toole asked if the recommendations would be made into an executive summary. He was curious if the recommendations would be finalized at the meeting, but Campbell responded that there would be a final meeting in December to finalize the recommendations.

Davis suggested that the report also include more information on the potential for industrial manufacturing economic development. Campbell agreed and expounded on the US Department of Energy grant that the Clemson University Restoration Institute (CURI) had applied for that would be critical to getting the industry started and that CURI would provide a presentation at the December meeting.

III. Presentations:

Offshore-Wind Project in South Carolina: The Potential Natural Resource Impacts – Bob Perry, South Carolina Department of Natural Resources

Mr. Perry of the SC Department of Natural Resources spoke on behalf of the Coastal Clean Energy Regulatory Task Force. The objective of his presentation was to further introduce a list of potential natural resource impacts that may be associated with a wind energy production farm located off the northern upper coast of South Carolina. The main point he wanted to get across was that the exact location will be the biggest question. Variations in location will greatly vary the environmental impact of an offshore wind farm. Potential environmental impacts include an affected action in the marine, near-shore and associated upland environments. There will be any number of potential

environmental impacts covered under Federal or State environmental laws or regulations. The impacts will be analyzed under the stepwise process outlined in the National Environmental Policy Act (NEPA). Under a good scenario, such a process should take two to three years. The following areas must be analyzed: within the marine environment (from site location to the high water mark), areas above the surface, the surface, the water column, and the bottom; the near-shore environment (from the high water mark to inland connection destination(s)); and the upland environment (from the nearshore to inland connection destination(s)). The greatest impact will be on marine life and above the surface for avian species. This will affect both breeders and migratory birds such as the scaup, scoters, and pelicans. Perry spent much of his early career flying aerial surveys of coastal migratory birds. He said that there were times that they would see over 100,000 scaup and scoters at the same time, and that considerable marine geo-spatial planning will be required to determine the best location to locate desirable wind while avoiding natural resource impacts.

He also described the potential impacts of transmission and cabling for endangered loggerhead turtles that nest on SC beaches. He stressed that North Island is an inviolate wildlife sanctuary by deed restriction as is Hobcaw, the Belle Baruch Foundation property. North Island is a wilderness area of about 4,000 acres only accessible by boat.

Mr. Perry indicated that there were probably no “show stoppers” but that is still uncertain at this time. Many unwanted impacts could probably be avoided by a change of location. Questions were asked and Laurel Barnhill, the DNR avian specialist was brought up to help answer questions.

Questions included whether the migratory birds were less of a problem farther out to sea. They answered that typically this was so. They also talked about the birds being able to modify their patterns after a while—a coping or avoidance mechanism. They also talked about the bats that have been problematic with onshore wind farms. This was cited as an example where one really needs to look at the location before constructing a wind farm. Bats would not be a problem offshore.

The NEPA Process for Offshore Wind Farms – Doug Heatwole, Ecology and Environment, Inc.

Doug began his presentation with some background information: within 3 miles of shore, State has authority. From 3 to 200 miles offshore, Minerals Management Service (MMS) has authority (conveyed by Energy Policy Act of 2005). MMS issues renewable energy leases, easements, and rights-of-way under Outer Continental Shelf Lands Act. MMS has the authority to issue leases offshore as of EPACT 2005. FERC is in charge of wave and current energy.

Doug spoke in great depth on the impending NEPA process that permitting a wind farm entails. NEPA, the National Environmental Policy Act was passed in 1969 and requires federal agencies to consider the environmental consequences of their actions. There are 2 types of NEPA investigations:

- 1) Environmental Assessments, when it is uncertain whether the proposed action would result in significant impacts.
- 2) Environmental Impact Statements, for proposed actions that may have significant impacts.

According to MMS, an EIS would more than likely be required for any offshore wind farm. This requires public input/involvement. Stakeholders include coastal states, agencies, fishermen, recreational boaters, commercial shipping, waterfront landowners, marine/coastal advocacy groups, and utilities/power generators. The leasing process can take about 2-2 ½ years. There are different time levels of leases; there is the limited lease is used for resource assessment and technology testing and lasts for 5 years and the commercial lease, which is generally 25 years. Either of these can either be competitive or noncompetitive. Most projects would require 2 stages of NEPA: the lease sale process (2-2.5 years) and the site assessment plan (SAP)/construction and operation plan (COP), which requires 1-2 years. Therefore, the regulatory process may require 4 to 4.5 years from initial concept to granting of a license.

Plan information required under the MMS regulatory framework includes water quality, biological resources, threatened and endangered species, sensitive biological resources or habitats, archaeological resources, socioeconomic information, coastal and marine uses. MMS adopted a policy of adaptive management. Uncertainty of impacts requires “learn as you go.” We need well-designed monitoring programs. Phased development facilitates adaptive management.

NEPA requires addressing cumulative impacts/effects from past, present, and reasonably foreseeable future actions. While one wind farm may not have a significant impact, multiple wind farms may result in a cumulative significant impact. Furthermore, the spatial area for assessing cumulative impacts can be quite large depending on the resources affected. For example, some marine mammals, such as the right whale, migrate between Massachusetts and Florida, meaning that wind farms anywhere along this distance could contribute to cumulative impacts on this species.

Federal Aspects of Marine Spatial Planning and Territorial Sea Planning: How state policy can line up with federal policy – Steve Kopf, Pacific Energy Ventures

Mr. Steve Kopf began with a brief description of Pacific Energy Ventures, LLC and its employees. Industry imperatives include balancing new and existing ocean uses, establishing consistent and appropriate regulatory process, understanding project effects – environmental and socioeconomic, coordinating industry needs and prioritizing research and development, identifying resource gaps – workforce and maritime infrastructure, and developing market support. The cost for offshore wind in Delaware is 18 cents/kWh (They have an RPS, which provides confidence to the investment community).

Other methods for encouraging offshore wind besides an RPS include:

- Carve outs where a certain percentage of an RPS must come from wind
- Investment tax credits at the state level
- Quantifying aggregate market costs

The development phase is very expensive. Investors need clarity and a roadmap showing where state and federal processes overlay.

Territorial Sea Plans are a must. The State needs to get out in front. States should include a clawback provision for environmental studies.

Committee members were interested in knowing whether other states' initiatives were driven by the private sector. The answer was that it depends. Apparently Cape Winds shows an example of when the private sector gets out in front of the government and the difficulty that that implies.

Toole wanted a whole renewable energy plan. He talked about small hydro plants in his district that are interested in net metering.

Recommendations from Regulatory Task Force for Coastal Clean Energy – Catherine Vanden Houten, SC Energy Office, and Blair Williams, Office of Coastal Resource Management, SC Department of Health and Environmental Control

Ms. Catherine Vanden Houten of the South Carolina Energy Office made a presentation of recommendations of the Regulatory Task Force for Coastal Clean Energy. She began by explaining that the Regulatory Task Force was established as a result of a 2008 grant from the U.S. Department of Energy entitled: the South Carolina Roadmap to Gigawatt-Scale Coastal Clean Energy Generation: Transmission, Regulation & Demonstration. The goal of the grant is to overcome existing barriers for coastal clean energy development for wind, wave and tidal energy projects in South Carolina. Included in the grant are the offshore wind transmission study; wind, wave & current study; and the Regulatory Task Force for Coastal Clean Energy.

The mission of the Regulatory Task Force is to create a regulatory environment conducive to wind, wave and tidal energy development in state waters. The Task Force is comprised of the full spectrum of state and federal regulatory and resource protection agencies, universities and utility companies. The Task Force was established in April and has had regular meetings since May. While the work of the Task Force will continue until 2011, there was consensus among the members to present some preliminary recommendations to the Wind Farm Feasibility Study Committee at this meeting.

Catherine explained that the Regulatory Task Force was making three main recommendations to the Committee:

1. The first recommendation is that South Carolina needs to establish a policy of support for the renewable energy. There are various ways to achieve that goal including executive and legislative approaches. In terms of renewable energy policy, eight states have offshore wind initiatives (six of them are in states with renewable portfolio standards), 24 states have a renewable portfolio standard, and five states have nonbinding goals for renewable energy. She pointed out that without state-level support for renewable energy development, South Carolina may miss out on the opportunities to attract renewable energy investors to this state.

In order to provide context and background for the subsequent recommendations, Catherine then introduced Blair Williams of Office of Ocean and Coastal Resource Management with SC Department of Health and Environmental Control (and member of the Regulatory Task Force). Blair made a brief presentation on a regulatory roadmap for offshore wind projects. He explained the work that the Task Force had done to identify lead permitting authorities, identify timeframes associated with regulatory permitting, and identify regulatory gaps. Blair spoke about projects in state waters and what resource agencies would be involved in permitting such a project. He explained that through this exercise, the Regulatory Task Force had clarified timeframes. He concluded his remarks by pointing out that a previous Memoranda of Agreement may need to be strengthened and updated (e.g. MOA PSC & SC Coastal Council, 1978). He also pointed out that Marine Spatial Planning (MSP) is a possible management or planning gap. Geospatial information about ocean resources, uses and conditions is needed for comprehensive planning. He pointed out that the SC Ocean Planning Work Group is looking at needs for MSP in SC waters. He concluded, however, that no major regulatory gaps were identified in this process.

Catherine Vanden Houten then summarized the final two recommendations of the Regulatory Task Force to the committee. In light of the findings that Blair Williams outlined, she explained that no regulatory gaps had been identified by the Task Force that would prevent the permitting of an offshore wind farm. However, she explained, two significant issues remain: that permitting may not address the entirety of issue and that the permitting process is complicated and cumbersome. Therefore, the Regulatory Task Force recommends that a leasing framework be developed. She explained that while the permitting structure is in place, permits are short-term, do not protect user investment, do not provide exclusivity, can be withdrawn, and do not allow compensation to the state. The result is uncertainty for both the state and investors. The recommendation is then that South Carolina should develop a leasing framework to create a more comprehensive process, because leases provide more certainty for the state and investors.

The third recommendation of the Task Force is that a “one-stop-shop” be developed, which would make the process more efficient by coordinating the permitting/leasing process. A model for a one-stop-shop already exists in SC for aquaculture. The Task Force is proposing that some sort of coordinating function could be housed in a non-regulatory agency, responsible for assisting investors through the leasing/permitting process and coordinating and streamlining the various steps in the process.

Catherine went on to summarize what other states and the federal government have done so far regarding offshore wind. She provided highlights from similar efforts and studies in North Carolina, Michigan, Texas, Virginia. She explained that each of these states grappling with these issues have come to similar conclusions that the Regulatory Task Force has.

Catherine concluded by reiterating the three recommendations of the Regulatory Task Force was making to the Committee: (1) South Carolina should develop a state policy supporting renewable energy, (2) a comprehensive leasing framework should be

developed for offshore wind, and (3) a one-stop shop needs to be established for permitting and leasing wind energy projects.

IV. Other Discussion Items

Approval of July 13, 2009 minutes: Hardwick motioned that the committee should approve the minutes and Toole seconded the motion. All in favor. None opposed.

V. Next Meetings

Public Hearing – October 12, 2009 at the Baruch Institute in Georgetown, 6pm – 8 pm
Final Committee Meeting – December 7, 2009 in 209 Gressette Office Building in Columbia, SC, 1pm – 4 pm

VII. Adjourn