WIND STUDY FAVORS SOUND NEAR BUXTON

catching up

North Carolina lags behind other states in creating a wind energy strategy, a state report said.

By Catherine Kozak
The Virginian-Pilot

After measuring wind value and eliminating conflicts with bird migratory patterns, fish habitat and military air space, a new state coastal wind study says the best spot for utility-scale wind energy is in the sound off Buxton.

The University of North Carolina at Chapel Hill feasibility study, requested last year by state Sen. Marc Basnight, D-Manteo, found that most other state waters are unsuitable for wind-energy development.

The study will be unveiled at a state Coastal Resources Commission meeting Thursday.

Turbines that are used in a wind-energy system would be suitable to hook up to the power grid, unlike the smaller ones seen at the Outer Banks Brewing Station and Coquina Beach, said Nancy White, director of

See **WIND, BACK PAGE**

WIND | *9-month study analyzed many factors*

Continued from Page 1

the UNC Coastal Studies Institute in Manteo. The institute provided technical support during the study.

"I think we need to be proactive about it, truly," White said. "We can't put our heads in the sand and ignore it."

North Carolina lags behind other states in creating a wind energy strategy, the report said, but it has enough advantages to enable it to catch up.

The nine-month study analyzed the areas of available wind power, the ecological risks, user conflicts, compatibility with geological dynamics, electrical transmission infrastructure, regulatory barriers and carbon reduction potential.

On a scale of 1 to 7, class 5 winds or greater are required to support utility-scale wind farms. Such power is found in the eastern Pamlico Sound, the study said, but is less likely to be found in sounds elsewhere.

"Wind power class 6 is common offshore," it said, "and may reach class 7 in the vicinity of Cape Hatteras."

Other findings included:

- Large areas of the Pamlico Sound and some parts of the coastal ocean are incompatible with wind turbines because of inlets, navigation corridors, commercial fishing, radar, oyster reef sanctuaries, seagrass beds, reef habitats, shipwrecks, beach nourishment-quality sand deposits, and military ordnance.
- The state needs to change its regulations and determine jurisdictional authority in order to remove legal barriers to wind power.
- The power transmission system on the northern coast would have to be upgraded to accommodate significant offshore wind energy.
- Carbon reduction from a small inshore wind farm over a 20-year lifetime would be the equivalent of taking 550,000 vehicles off the road or offsetting the combustion of 16,000 rail cars of coal.

Basnight directed that the 2009-10 state budget include $300,000 to continue the wind study and to contract with a third party to build three demonstration wind turbines and necessary support facilities.

Such a pilot program was one of the recommendations in the study.

"North Carolina is well positioned to develop utility-scale wind energy production," the report said, "and should pursue it aggressively."

Schorr Johnson, Basnight's spokesman, said the senator recently visited a land-based wind farm in Canada.

The coastal institute's White, who is a member of the state's offshore energy study subcommittee, said in-depth data about offshore wind resources are not yet available. But the committee will take into account the findings of the Pamlico study.

"I think they feel like the real value in wind is offshore," White said. "I think some decision has to be made how the best interest of the community and the state will be served."

Catherine Kozak, (252) 441-1711, cate.kozak@pilotonline.com

online

Read the study: www.climate.unc.edu/coastal-wind