



N. C. ENVIRONMENTAL MANAGEMENT COMMISSION

Beverly Eaves Perdue,
Governor

Dee Freeman, Secretary,
N. C. Dept. of Environment
and Natural Resources

Stephen T. Smith
Chairman

Charles Peterson
Vice Chairman

Donnie Brewer
Thomas F. Cecich
Stan L. Crowe
John S. Curry
Marion Deerhake
Tom Ellis
E. Leo Green, Jr.
Freddie Harrill
Ernest W. Larkin
Kevin Martin
David H. Moreau
Darryl D. Moss
David B. Peden
Dickson Phillips III
Kenny Waldroup
Steven D. Weber
Forrest R. Westall, Sr.

April 2, 2009

To: The Environmental Review Commission of the N.C. General Assembly

From: Stephen T. Smith,
Chairman
N.C. Environmental Management Commission

Enclosed is the quarterly report of the N.C. Environmental Management Commission. As you will see this report is considerably briefer than in the past and is more in the form of an executive summary. Please let me know if you prefer greater detail.

Also enclosed is the EMC's recommended legislation on permitting wind energy facilities. This results from the 2008 Studies Bill and the ERC's request that the EMC study methods for implementing a State-level permitting system and siting requirements for commercial-scale wind energy systems. This recommended legislation has been introduced this Session as HB 809 and SB 1068.

N.C. ENVIRONMENTAL MANAGEMENT COMMISSION QUARTERLY REPORT TO THE ENVIRONMENTAL REVIEW COMMISSION

Covering the period January 1, 2009 to March 31, 2009

This quarterly report is submitted to the Environmental Review Commission on the EMC operations, activities, programs, and progress pursuant to the requirements of G.S. 143B-282(b). This report is for the months of January 1, 2009 to March 31, 2009 and provides information on the actions of the EMC.

I: Nutrient Control Strategies Section 2. (b) and Section 4 of Session Law 2005-190

Falls Lake - Section 2. (b) of Session Law 2005-190

The EMC is required to report its progress in assessing and identifying nutrient control strategies and criteria necessary to prevent excess nutrient loading in the Falls Lake water supply reservoir. The following is an update on the progress.

The watershed model has been calibrated and validated, incorporating comments from the Falls Reservoir Technical Advisory Committee (TAC). A final watershed modeling report has been drafted. The lake nutrient response model calibration results were presented to the TAC on March 23, 2009. TAC members have 60 days to review the lake model and documentation.

DWQ held its 4th meeting with stakeholders on February 19, 2009 as part of the rule making process to develop a nutrient management strategy for Falls Lake. The objective of this meeting was to elicit stakeholder interests and expectations as well as review lessons learned from the Jordan Lake stakeholder and rule making process. The first stakeholder meeting was held on August 2008 with the stakeholder process currently scheduled to run through April 2010. The next stakeholder meeting is scheduled for May 21, 2009.

Jordan Reservoir - Section 4 of Session Law 2005-190 (amended by SL 2006-259)

The EMC is required to report its progress in developing and implementing nutrient management strategies for the B. Everett Jordan Reservoir. The following is an update on the progress.

All of the Jordan rules, approved by the RRC during the latter half of 2008, received sufficient objections to come before the 2009 session of the General Assembly. Bills were filed in both houses in the first days of the session to disapprove all of the rules—

H3, S166, and H350. To this point, no arbitration process has been initiated by the legislative staff. Affected parties have raised issues to the Department informally and negotiations are underway.

II: EMC Rulemaking Actions and Proposed Legislation

- Approved proceeding to public hearing to amend air quality permit noticing requirements for 15A NCAC 02Q .0518 Final Actions, and 15A NCAC 02Q .0521, Public Participation, to allow notice by internet posting in some instances.
- Approved proceeding to public hearing regulations on 15A NCAC 02D .1010, Heavy-Duty Vehicle Idling Restrictions regarding diesel idling.
- Approved proceeding to public hearing with the proposed reclassification of Dan River in Caswell County (Roanoke River Basin) to Class WS-IV and WS-IV CA
- Adopted revisions of the Well Construction Rules, 15A NCAC 2C .0100.
- Approved the reclassification of a 16 mile section of Boylston Creek in Transylvania and Henderson Counties (French Broad River Basin) to Trout Waters.
- Denied the reclassification of Fines Creek in Haywood County (French Broad River Basin) to Trout Waters.
- Recommended wind energy permitting legislation to the N.C. General Assembly
- Approved revised Municipal Waste Combustor Rules (15A NCAC 02D .1205 and .1212)

III: Other EMC Actions

- Found that substantial progress has been made by the City of Raleigh in the Upper Neuse River/Richland Creek Water Supply Watershed enforcement action.
- Approved the *Broad River and Yadkin –Pee Dee River Basinwide Water Quality Plans* as a guide to water quality program management and implementation by the Division of Water Quality as it carries out its Water Quality Program duties and responsibilities within the basins.



ENVIRONMENTAL MANAGEMENT COMMISSION

NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Stephen T. Smith
Chairman
Charles Peterson
Vice Chairman

Beverly Eaves Perdue, Governor
Dee Freeman, Secretary

Donnie Brewer
Thomas F. Cecich
Stan L. Crowe
John S. Curry
Marion Deerhake
Tom Ellis
E. Leo Green, Jr.
Freddie Harrill
Ernest W. Larkin

Kevin Martin
David H. Moreau
Darryl D. Moss
David B. Peden
Dickson Phillips III
Kenny Waldroup
Steven D. Weber
Forrest R. Westall, Sr.

To: The Honorable Charles W. Albertson, Co-Chair
The Honorable Daniel G. Clodfelter, Co-Chair
The Honorable Lucy T. Allen, Co-Chair
The Honorable Pryor A. Gibson, III, Co-Chair

From: Stephen T. Smith, Chairman, N. C. Environmental Management Commission
J. Dickson Phillips, III, Chairman, EMC Renewable Energy Committee

Re: Proposed Wind Energy Permitting Legislation

Date: March 17, 2009

Senate bill 3 (session law 2007-397) provided the Environmental Management Commission (EMC) with the authority to evaluate renewable energy technologies and establish environmental standards to ensure that renewable energy facilities do not harm the environment. Consistent with that authority, legislative staff counsel of the Environmental Review Commission requested that the EMC provide recommendations to the General Assembly on the development of a wind energy permitting program.

We are pleased to send you the attached report, which includes draft legislative language, fulfilling the request of the Environmental Review Commission. As outlined in detail in the report, during the course of the last nine months the EMC's Renewable Energy Committee heard a number of presentations on this subject, evaluated how other states have addressed this issue and convened a stakeholder advisory group to assist with our recommendations. The attached report was approved by the Renewable Energy Committee on March 11, 2009, and by the full EMC on March 12, 2009.

If you have any questions or would like further information, please contact Dickson Phillips at dphillips@lapgh.com or 919-967-8989 or Steve Smith at smith@mspraleigh.com or 919-821-5124.

cc: The Honorable Joe Hackney, Speaker of the House of Representatives
The Honorable Marc Basnight, President Pro-Tempore of the Senate

Report to the
Environmental Review Commission

Development of a Wind Energy Permitting
Program in North Carolina

March 2009

Recommendations of the
North Carolina Environmental Management Commission

Background

Session law 2007-397, more commonly referred to as Senate bill 3, created a renewable energy and energy efficiency portfolio standard for North Carolina. The purposes of the portfolio standard as outlined in the session law are to diversify energy resources, encourage private investment in renewable energy and improve air quality.

Included in the session law was a provision directing the Environmental Management Commission to evaluate renewable energy technologies. The language in the session law reads as follows:

The Commission may establish a procedure for evaluating renewable energy technologies that are, or are proposed to be, employed as part of a renewable energy facility, as defined in G.S. 62-133.7; establish standards to ensure that renewable energy technologies do not harm the environment, natural resources, cultural resources, or public health, safety or welfare of the State; and, to the extent that there is not an environmental regulatory program, establish an environmental regulatory program to establish these standards.

Following the passage of Senate bill 3 the Environmental Management Commission established a Renewable Energy Committee (Committee) for the purposes of evaluating and identifying whether appropriate regulatory programs for renewable energy facilities are in place to guide the development of renewable energy facilities.

The Committee's first order of business was to issue a public scoping notice. The Committee asked for public comments related to the current status of renewable energy development in North Carolina; the full range of human health, environmental and community impacts associated with renewable energy facilities; and all other relevant information. (See Appendix I)

In response to the scoping notice the Committee received a number of comments on varying renewable energy technologies from industry groups, environmental organizations and citizens. The comments received related to wind energy projects focused primarily on two distinct topics. First, commenters expressed support for the development of a statewide regulatory framework that would include environmental standards and also provide certainty for developers of wind projects. The second area of comments focused specifically on a proposed wind energy facility in Carteret County. That proposed project is no longer viable, in part, because of the wind energy ordinance recently adopted by the County.

Based on the comments received from the scoping notice the Committee began to gather more information and began scheduling presentations on wind energy. The Committee was presented information from a number of diverse entities, including the North Carolina State Energy Office, Duke Energy, Progress Energy, the North Carolina Utilities Commission, the North Carolina Sustainable Energy Association, the North Carolina Conservation Network, and Acciona Energy (a renewable energy development

company). The committee also sought the legal advice of the Attorney General's Office about its authority to establish a permitting system for wind energy facilities (Appendix II)

In addition to its own work on wind energy, the Committee was also aware of related ongoing efforts at the state level and made a substantial effort to coordinate its activities with these other efforts. For example, the current chair of the Environmental Management Commission presented to the Coastal Resources Commission about the ongoing work related to developing a wind energy permitting program. In addition, the Renewable Energy Committee devoted time to learning and understanding more about the ongoing wind study being conducted by UNC-Chapel Hill.

Near the conclusion of the 2008 legislative session the General Assembly passed the 2008 Studies Bill (Session Law 2008-181). Included in the session law was a provision authorizing the Environmental Review Commission to study methods for siting and permitting commercial scale wind energy facilities. The provision reads as follows:

SECTION 6.5. Wind Permitting (H.B. 1821 – Harrison) – The Commission may study methods for implementing a State level permitting system and siting requirements for commercial-scale wind energy systems that will ensure that wind energy systems are sited in an orderly manner compatible with environmental preservation, sustainable development, and the efficient use of resources. In undertaking the study, the Commission may consider procedures for environmental review of commercial-scale wind energy systems, and standards necessary to minimize impacts in the following areas: noise, visual, environmental, sensitive habitats, wildlife, public health, safety. The Commission may form a technical advisory committee to include representatives from various stakeholder groups to assist in conducting this study.

Given that the Committee's work was already underway, legislative staff for the Environmental Review Commission requested that the work of the Committee serve as a substitute for this legislative study. Legislative staff also requested that the work of the Committee result in specific legislative recommendations.

Acting on the invitation of the legislature, the Committee turned its sole focus to developing legislative recommendations for a statewide wind energy permitting program. The Committee contracted with the North Carolina State University Solar Center to establish a technical advisory group that could provide assistance to the Committee. For the past several years the Solar Center has been convening a Wind Working Group and assisting with the development of the local model ordinance for wind facilities. The technical advisory group consists of representatives from state and federal environmental agencies, legislative staff, local governments, wind development companies, and environmental advocacy organizations. The group has provided assistance on such specific topics as construction standards, noise impacts, environmental and cultural impacts, shadow flicker, aviation impacts and regulatory barriers.

During the Committee's deliberations on developing a permitting program the Committee heard a presentation from an Assistant Secretary with DENR on the existing environmental state laws already applicable to the construction and development of wind energy facilities. (See Appendix III) This outline of existing statutory requirements helped shape the basis of the Committee's thinking as it worked to develop specific legislative recommendations.

Policy Decisions

In the development of the legislative recommendations the Committee made a number of policy decisions. The Committee started from the position that the state needs a clear statement of policy that supports development of wind energy resources in a responsible manner. The following briefly outlines a few of the critical decisions reflected in the legislative draft and elaborates on the reasoning behind the Committee's choices.

Threshold for State Permitting

The Committee made a determination early on in its work that some level of state involvement was appropriate for wind energy facilities of a certain size. The tougher question came as to where that threshold for state involvement should be set. Discussions on this topic included setting the state permit requirements at a level as low as 100 kilowatts. An examination of other states' statutes revealed that state involvement for wind facilities varies widely. For example, some states, such as Maine, regulate wind energy facilities as small as 100 kilowatts while other states, including the Dakotas and Oregon, do not regulate wind energy developments until they exceed 100 megawatts.

Ultimately, the Committee selected a two megawatt facility (one or more turbines) as significantly large in scope that it should require a state permit. The two megawatt threshold is also consistent with the requirements for facilities to obtain a certificate from the N.C. Utilities Commission under Senate bill 3. In order to ensure that cumulative impacts are addressed, wind energy facilities trigger the permit requirement when the two megawatt threshold is reached by aggregating the rated capacity of the subject project with any other wind energy facilities within one-half mile (which is the distance at which shadow flicker and noise impacts are observed to dissipate).

Permitting Framework

One of the fundamental questions facing the Committee involved identifying the proper agency or agencies to make permitting decisions for wind energy facilities. The discussion on this issue quickly focused on two alternatives. The first option considered was to create a new single statewide permitting agency for wind energy facilities. The obvious benefit of this proposal was the consistency that would be created both from permit standards and the permit review practice. However, one significant problem with this approach was the lack of resources to create a new permit review program.

With financial resources as a big concern and the acknowledgment that the number of permit applications may be minimal in the near future, the Committee turned to the second alternative. This alternative provides that in the coastal part of the state wind permitting will be carried out by the existing Coastal Area Management Act permitting program and that in the mountains and piedmont the Division of Land Resources will issue permits. Although some statutory changes to these existing regulatory programs would need to be made, in many cases the changes needed are relatively simple as reflected in the draft legislative language.

The disadvantage of using two different programs is the possibility of inconsistent implementation. The proposed draft requires consultation by the two permitting authorities in the further development of the permitting program, including rulemaking, to promote consistency where appropriate. However, because wind energy resources in North Carolina are found in two distinct regions, the location-based knowledge and expertise of the two different permitting authorities may be of benefit and may appropriately lead to some variation in the evaluation of permitting criteria. For example, the Division of Land Resources has expertise in mountain topography, including landslide hazards, which will entail siting considerations not present in the coastal area.

Local Government Authority

The Committee deliberated the issue of how to define local government authority with respect to wind energy facilities. The issue of state oversight versus local oversight of wind energy facilities was raised at the first Committee meeting and was a topic that was discussed and evaluated over months. The Committee heard presentations on how other states chose to handle this subject. The possibilities ranged from having no state oversight to complete state preemption over wind facilities. For example, Texas has little state regulation of wind energy developments, while in Wisconsin large wind energy facilities are regulated solely by the state.

From the outset, given the important state interests involved, the Committee asserted that some type of state oversight was necessary. The Committee also weighed closely the benefits and adverse consequences of limiting local government authority to regulate wind energy facilities based on the state's interest in developing renewable resources.

The Committee concluded that the best decision was to have state permitting oversight but to allow local governments to continue to exercise the full range of land use and police power ordinances. In reaching that decision the Committee recognized that in some cases local governments may choose to enact ordinances that directly or indirectly preclude wind energy development. However, several counties have already adopted wind energy ordinances that provide reasonable setbacks and other criteria for local permitting and there is reason to believe other counties are in the process of adopting their own ordinances that will invite responsible development of wind energy within their jurisdictions. A model local ordinance has been developed by the statewide Wind Working Group, which together with outreach efforts by the State Energy office,

Appalachian State University and the Solar Center, are serving to educate local officials and to encourage appropriate local regulation.

Mountain Ridge Protection Act

The Committee identified the current uncertainty related to the Mountain Ridge Protection Act (N.C.G.S. 113-205, et seq.) as a potential barrier to wind energy development. The Ridge Act prohibits construction of tall structures on mountain ridges with an elevation of greater than 3,000 feet. In a 2002 letter, North Carolina's Attorney General took the position that the Ridge Act's exemption of windmills does not cover utility-scale wind energy facilities (See Appendix IV). Given continued uncertainty related to the Ridge Act, the statute in its current form without change will likely have the continued effect of foreclosing any significant wind development in the mountains or of generating litigation over the proper interpretation of the exemption for "windmills".

In an effort to address this barrier the Committee is recommending a change to the Ridge Act that would allow local governments the ability to opt out of the Ridge Act to a limited degree. In order to opt out of the Ridge Act for wind energy facilities, the local government would have to adopt a local ordinance regulating wind energy facilities. It is important to note that this "opt out" option would only apply for wind turbines and not other tall structures.

In addition, the Committee is recommending that the Ridge Act be amended to make clear that wind turbines with generation capacity of less than 100 kilowatts are exempted from the Act. This recommendation is an effort to encourage small scale projects at schools, municipal facilities and other appropriate locations. Furthermore, this recommendation is consistent with the current exemption in the Ridge Act for windmills.

Water Dependent Structures

One important regulatory barrier to fully developing wind energy resources in the coastal area of the state arises from existing rules under the Coastal Area Management Act (CAMA). CAMA rules strictly limit development activities in coastal wetlands, estuarine waters and other public trust waters. The rule applicable to development in waters and wetlands currently prohibit structures that are not water-dependent. Under the rules, a structure is considered to be water dependent if it must be located in or over the water to serve its intended purpose.

The Committee is recommending statutory language that would make a legislative finding that wind energy facilities are water dependent. This finding is supported by wind resource data which identify winds over the sounds and over the ocean as the most productive and likely most commercially viable.

State Environmental Policy Act (SEPA) Applicability

The North Carolina State Environmental Policy Act (SEPA) requires the preparation of an environmental impact statement (EIS) for any state action (such as issuance of a permit) that involves use of public money or use of public land. In the absence of local, state or federal funding for a wind turbine project, the requirement for an EIS would be triggered only if the project was constructed on state lands, including state-owned submerged lands under coastal waters. Consequently, offshore wind turbines would likely trigger an EIS based on the impacts to state-owned submerged lands.

The Committee considered recommending that all wind energy facilities be required to go through the SEPA process. This idea followed recent legislative action which requires specific types of projects (landfills, inter-basin transfers) to go through the SEPA process regardless of whether public money or public land is involved. The Committee chose not to include this requirement for two primary reasons. First, the Committee was concerned about adding additional regulatory and financial burdens to an emerging industry. Secondly, the Committee believes the permitting process outlined in the draft proposal provides for a stringent review of any proposed wind energy facility. However, the Committee clearly expects that wind energy facility projects that would normally be subject to SEPA should remain so.

Public Notice Requirements

The Committee is recommending the requirement for a public hearing in every case where a wind energy facility is proposed. One of the key policy choices in that decision concerns when the proper time in the process is to hold the public hearing. Within those states that require public hearings for wind projects, some require that the hearings be held once the application has been received by the reviewer (Iowa), once the application has been deemed to be complete by the reviewer (New Hampshire), or once a draft order has been issued (Oregon).

In an effort to get the public and community involved as early as possible. The Committee is recommending a public hearing be required within sixty days of a completed application. Notice of this hearing must be provided at least thirty days before the public hearing.

Further Items for ERC Consideration

The Committee also identified additional issues for the Environmental Review Commission and the General Assembly to consider as it moves forward with any legislation related to wind permitting. However, the Committee does not have specific recommendations on these issues, but believes the resolution of these issues is of such significance that we have chosen to identify them here.

The first issue the Committee has identified for further study or examination involves private use of public trust resources. More specifically, the State should decide whether to and how much to charge wind energy facilities that lease public trust areas from the State. This examination would include consideration of a compensation policy that would require wind energy facilities to pay the State for the use of the water column above public submerged lands used in locating a wind facility. The Department of Administration should be involved in providing further recommendations on this topic.

The second issue the Committee has identified for further consideration relates to the potential for fundamental conflict among uses from the placement of wind energy facilities. One example of this type of conflict involves fisheries issues and siting of wind energy facilities offshore and in the sounds. While the Committee's proposed legislative language makes clear that all other applicable permits and approvals from local, state and federal agencies must be obtained, the issue of user conflicts should be further evaluated during the legislative consideration of this proposal.

Draft Legislative Language

“The Wind Energy Development Promotion Act of 2009”

Whereas, S.L. 2007-397 established a Renewable Energy and Energy Efficiency Portfolio Standard (REPS) to diversify the resources used to reliably meet the energy needs of consumers in the State; and

Whereas, wind energy generation is a critical component for the State to meet the requirements established by the REPS; and

Whereas, North Carolina has abundant wind resources in both the coastal and mountain regions; and

Whereas, wind energy facilities are large structures that are highly visible features on the landscape and have the potential to cause adverse environmental impacts; and

Whereas, it is the policy of the State to promote the development of wind energy in a manner compatible with environmental protection, sustainable development and the efficient use of resources;

Now, therefore,

The General Assembly of North Carolina enacts:

SECTION 1. CAMA Amendments

113A-103 reads as rewritten:

113A-103 Definitions

- (12) “Wind energy facility” means the turbine or turbines, accessory buildings, transmission facilities and other equipment necessary for the operation of a facility that cumulatively with any other wind energy facility whose turbine or turbines are located within one-half mile of one another has a rated capacity in excess of two megawatts of energy.

113A-118.3 Permits for wind energy facilities

(a) In addition to the requirements of G.S. 113A-118, no person shall undertake development associated with a wind energy facility anywhere in the coastal area without first obtaining a permit from the Commission.

(b) A person applying for a permit for a wind energy facility shall include all of the following:

- (1) A narrative description of the proposed facility;
- (2) A map showing the location of the proposed facility;
- (3) The capacity of proposed energy generation;
- (4) A copy of a deed, purchase agreement, lease agreement or other legal instrument demonstrating the right to develop the property;
- (5) Certification of adjacent property owner notification;
- (6) A study of the noise impacts of the proposed facility;
- (7) A study on shadow flicker impacts of the proposed facility;
- (8) A study on avian and bat impacts of the proposed facility;
- (9) A study on viewshed impacts of the proposed facility;
- (10) An explanation of the how the proposed facility will be consistent with the requirements in 113-118.3(c).
- (11) Application fee; and
- (12) Such other data or information the Commission may reasonably require.

(c) The Commission shall deny an application for a permit for a wind energy facility if the Commission finds that:

- (1) Construction or operation of the facility would result in significant adverse impacts to ecological systems, natural resources, cultural sites, recreation areas, or historic sites of more than local significance. These areas include, but are not limited to, national or State parks or forests; wilderness areas; historic sites; recreation areas; segments of the natural and scenic rivers system; wildlife refuges; preserves and management areas; areas that provide habitat for threatened or endangered species; and primary nursery areas and critical fisheries habitat designated by the Marine Fisheries Commission.
- (2) Construction or operation of the facility would obstruct major navigation channels or create a significant obstacle to navigation in coastal waters. For purposes of this section, a wind energy facility in the coastal area is a water dependent use.

- (3) Construction or operation of the facility would have a significant adverse impact on fish or wildlife.
- (4) Construction or operation of the facility would have a significant adverse impact on views from any state or national park, wilderness area, significant natural heritage area or other designated public lands or dedicated private conservation lands with high recreational values.
- (5) A permit for the facility would be denied under any other criteria set out in G.S. 113A-120.
- (6) The cumulative impact of the proposed facility with other existing or proposed wind energy facilities would result in significant adverse impacts to ecological systems, natural resources, cultural sites, recreation areas, or historic sites of more than local significance.

(d) The Commission may include as a condition of a permit for a wind energy facility a requirement that the permit holder mitigate adverse impacts.

(e) An applicant for a permit for a wind energy facility shall pay an application fee upon submission of the application of \$2000.

(f) The Commission shall require an applicant for a permit for a wind energy facility to provide a plan regarding the action to be taken upon the decommissioning and removal of the wind energy facility. The plan shall include estimates of monetary costs and the proposed site condition after decommissioning. The commission may require a bond, guarantee, insurance or other financial instrument to provide for decommissioning and removal of structures. The Commission shall consider the size of the wind energy facility, the location of the facility and the financial qualifications of the applicant in making its determination.

(g) The Commission shall hold a public hearing in the county of the proposed wind energy facility within 60 days of receipt of a complete application for a wind energy facility. The Commission shall give a minimum of 30 days notice of the public hearing.

(h) The issuance of a permit under this section shall not preclude the applicant from the requirement to obtain any and all other applicable local, state or federal permits, licenses or approvals.

(i) The Commission may adopt rules implementing this section. The Commission shall consult with the Department to ensure consistent statewide permitting requirements within and outside of the coastal area to the extent practicable.

SECTION 3.

143-215.74N Definitions.

- (1) "Department" means the The Department of Environment and Natural Resources.
- (2) "Wind energy facility" means the turbine or turbines, accessory buildings, transmission facilities and other equipment necessary for the operation of a facility that cumulatively with any other wind energy facility whose turbine or turbines are located within one-half mile of one another has a rated capacity in excess of two megawatts of energy.

SECTION 4.

143-215.74O Permit to site wind energy facilities outside the coastal counties.

(a) No person shall undertake development associated with a wind energy facility anywhere outside the coastal area without first obtaining a permit from the Department.

(b) A person applying for a permit for a wind energy facility shall include all of the following:

- (1) A narrative description of the proposed facility;
- (2) A map showing the location of the proposed facility;
- (3) The capacity of proposed energy generation;
- (4) A copy of a deed, purchase agreement, lease agreement or other legal instrument demonstrating the right to develop the property;
- (5) Certification of adjacent property owner notification;
- (6) A study of the noise impacts of the proposed facility;
- (7) A study on shadow flicker impacts of the proposed facility;
- (8) A study on avian and bat impacts of the proposed facility;
- (9) A study on viewshed impacts of the proposed facility;
- (10) An explanation of the how facility will be consistent with the requirements in 143-215.74O(c).
- (11) Application fee; and
- (12) Such other data or information the Department may reasonably require.

(c) The Department shall deny an application for a permit for a wind energy facility if the Department finds that:

- (1) Construction or operation of the facility would be inconsistent with or violate rules adopted by the Department.

- (2) Construction or operation of the facility would result in significant adverse impacts to ecological systems, natural resources, cultural sites, recreation areas, or historic sites of more than local significance. These areas include, but are not limited to, national or State parks or forests; wilderness areas; historic sites; recreation areas; segments of the natural and scenic rivers system; wildlife refuges; preserves and management areas; areas that provide habitat for threatened or endangered species; and primary nursery areas and critical fisheries habitat designated by the Marine Fisheries Commission.
- (3) Construction or operation of the facility would have a significant adverse impact on fish or wildlife.
- (4) Construction or operation of the facility would have a significant adverse impact on views from any state or national park, wilderness area, significant natural heritage area or other designated public lands or dedicated private conservation lands with high recreational values.
- (5) The proposed facility would be located in a high hazard area, including areas identified as being at a high risk of landslides.
- (6) The cumulative impact of the proposed facility with other existing or proposed wind energy facilities would result in significant adverse impacts to ecological systems, natural resources, cultural sites, recreation areas, or historic sites of more than local significance.

(d) The Department may include as a condition of a permit for a wind energy facility a requirement that the permit holder mitigate adverse impacts.

(e) An applicant for a permit for a wind energy facility shall pay an application fee upon submission of application of \$2000.

(f) The Department shall require an applicant for a permit for a wind energy facility to provide a plan regarding the action to be taken upon the decommissioning and removal of the wind energy facility. The plan shall include estimates of monetary costs and the proposed site condition after decommissioning. The Department may require a bond, guarantee, insurance or other financial instrument to provide for decommissioning and removal of structures. The Department shall consider the size of the wind energy facility, the location of the facility and the financial qualifications of the applicant in making its determination.

(g) The Department shall hold a public hearing in the county of the proposed wind energy facility within 60 days of receipt of a complete application for a wind energy facility. The Department shall give a minimum of 30 days notice of the public hearing.

h) The issuance of a permit under this section shall not preclude the applicant from the requirement to obtain any and all other applicable local, state or federal permits, licenses or approvals.

(i) The Department may adopt rules governing the siting of wind energy facilities that are subject to the permit requirements of this section. The Department shall consult with the Coastal Resources Commission to ensure consistent statewide permitting requirements within and outside the coastal area to the extent practicable.

SECTION 5. Enforcement

143-215.74P Civil Penalties

(a) The Secretary of the Department may impose an administrative penalty on a person who constructs a wind energy facility without obtaining a permit or who constructs a wind energy facility in violation of its permit terms and conditions. Each day of a continuing violation shall constitute a separate violation. The penalty shall not exceed ten thousand dollars (\$10,000) per day.

(b) The Secretary of the Department irrespective of all other remedies at law, may institute an action for injunctive relief against a person who constructs a wind energy facility without obtaining a permit or who constructs or operates a wind energy facility in violation of its permit terms and conditions.

SECTION 6 Local ordinances

G.S. 143-215.74Q Local ordinances authorized

- (a) Nothing in this Article shall be interpreted to limit the ability of a city or county to plan for and regulate the siting of a wind energy facility in accordance with land use regulations authorized under Chapter 160A and Chapter 153A.
- (b) Any person who proposes to construct or operate a wind energy facility within the planning jurisdiction of a city or county must demonstrate compliance with any local ordinances concerning land use and any applicable permitting processes.

SECTION 7. Ridge Protection Act Amendments

G.S. 113A-206 reads as rewritten:

113A-206. Definitions.

Within the meaning of this Article:

- (1) The word "person" includes any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body, the State of North Carolina and its agencies and political subdivisions, or other legal entity.
- (2) A person, as defined in this section, doing business or maintaining an office within a county is a resident of the county.
- (3) "Tall buildings or structures" include any building, structure or unit within a multiunit building with a vertical height of more than 40 feet measured from the top of the foundation of said building, structure or unit and the uppermost point of said building, structure or unit; provided, however, that where such foundation measured from the natural finished grade of the crest or the natural finished grade of the high side of the slope of a ridge exceeds 3 feet, then such measurement in excess of 3 feet shall be included in the 40-foot limitation described herein; provided, further, that no such building, structure or unit shall protrude at its uppermost point above the crest of the ridge by more than 35 feet. "Tall buildings or structures" do not include:
 - a. Water, radio, telephone or television towers or any equipment for the transmission of electricity or communications or both.
 - b. Structures of a relatively slender nature and minor vertical projections of a parent building, including chimneys, flagpoles, flues, spires, steeples, belfries, cupolas, antennas, poles, wires or windmills, including wind turbines for the generation of electricity having less than 100 kilowatts rated capacity (cumulatively with any other turbines within one-half mile) and wind turbines of 100 kilowatts capacity and above (cumulatively with any other turbines within one-half mile) to the extent allowed by a city or county ordinance regulating the siting of wind turbines.
 - c. Buildings and structures designated as National Historic Sites on the National Archives Registry.

Conclusion

The above recommended language represents the work of the Renewable Energy Committee and the Environmental Management Commission in the development of a statewide wind energy permitting program that will help the state guide the development of wind energy in a responsible manner. The language was approved by the Committee on March 11, 2009 on a consensus basis.

On March 12, 2009 the full Environmental Management Commission approved the report and voted to send the recommendations forward to the General Assembly's Environmental Review Commission for consideration.

The members of the Environmental Management Commission's Renewable Energy Committee are:

Mr. J. Dickson Phillips, III

Committee Chairman

Mr. Thomas F. Cecich

Mr. Stan L. Crowe

Mr. John S. Curry

Ms. Marion E. Deerhake

Mr. Tom Ellis

Dr. Charles H. Peterson

Mr. Stephen T. Smith

Environmental Management Commission Chair

APPENDIX I

EMC RENEWABLE ENERGY SCOPING NOTICE



North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

Scoping Process for Renewable Energy Facilities

Following the passage of NC senate bill 3, North Carolina is experiencing a surge in interest in the development of renewable energy facilities throughout the state. These facilities would generate electric power and other forms of energy through the use of renewable energy resources including solar, wind, methane capture and biomass (animal waste, wood waste and agricultural waste).

Section 2(c) of Session Law 2007-397 (senate bill 3) provides the Environmental Management Commission (EMC) with the authority to establish standards to ensure that the consumption of natural resources and renewable energy technologies do not harm the environment and to evaluate whether existing regulatory programs are sufficient to implement these standards.

Accordingly, the EMC is establishing an Alternative Energy Committee and launching a scoping process to lay the groundwork for evaluating whether North Carolina has in place the proper regulatory framework to guide the development of renewable energy facilities.

The EMC is interested in gathering information in the following areas:

- the current status of renewable energy development activities in NC;
- the full range of human health, environmental, and community impacts associated with renewable energy development;
- the existing regulations governing renewable energy facilities in North Carolina (including federal, state, regional and local contexts);
- best practices from other states and (if appropriate) other countries with regard to the permitting of renewable energy facilities; and
- any other relevant information on this topic.

Scoping comments should be sent to:

Environmental Management Commission
Attention: Renewable Energy Scoping Process
1617 Mail Service Center
Raleigh, NC 27699-1617

or

Electronically at: Renewable.Energy@ncmail.net

Comments are due no later than March 31, 2008.

The EMC will use the comments received during the scoping process to assist in its evaluation of existing regulations governing renewable energy facilities and intends to provide additional opportunity for public comment as the scoping process continues.

APPENDIX II

MEMORANDUM BY NC ATTORNEY GENERAL'S OFFICE ON SCOPE OF EMC AUTHORITY



State of North Carolina

ROY COOPER
ATTORNEY GENERAL

Department of Justice
PO Box 629
Raleigh, North Carolina
27602

REPLY TO: Francis W. Crawley
Environmental Division
fcrawley@ncdoj.com
Telephone: 919/716-6600
Fax: 919/716-6767

MEMORANDUM

TO: Stephen T. Smith, Chairman
Renewable Energy Committee

FROM: Francis W. Crawley *FWC*
Jennie Wilhelm Hauser
Special Deputy Attorneys General
Commission Counsel

DATE: September 10, 2008

RE: Environmental Management Commission Power and Authority Regulate
Renewable Energy Technologies and Facilities

You have requested this office to advise you and the Renewable Energy Committee on several issues regarding the Environmental Management Commission's (Commission) authority to regulate renewable energy technologies and facilities utilizing the renewable energy resources identified in Session Law 2007-397 ("Senate Bill 3").¹ You have asked whether the Commission is authorized to develop and implement regulatory programs for renewable energy resources that are not adequately covered by an existing regulatory program and whether the protective standards developed for a new regulatory program may be implemented through a permitting procedure? Our answer to both questions is "Yes."

Section 2.(c) of Senate Bill 3 amended the powers and duties of the Commission set forth in N.C.G.S. § 143B-282(a) to provide:

- (6) The Commission may establish a procedure for evaluating renewable energy technologies that are, or are proposed to be, employed as part of a renewable energy facility, as defined in G.S. 62-133.7; establish standards to ensure that renewable energy technologies

¹ This is an advisory memorandum. It has not been reviewed and approved in accordance with procedures for issuing an Attorney General's opinion.

do not harm the environment, natural resources, cultural resources, or public health, safety, or welfare of the State; and, to the extent that there is not an environmental regulatory program, establish an environmental regulatory program to implement these protective standards.

Section 2.(a) of Senate Bill 3 also lists the renewable energy resources envisioned as the sources of energy to be utilized by renewable energy facilities that generate electric power for the State's public utilities. Section 2.(a) defines "renewable energy resource" as follows:

(8) 'Renewable energy resource' means solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases, energy crops, or landfill methane; waste heat derived from renewable energy resource and used to produce electricity or useful, measurable thermal energy at a retail electric customer's facility; or hydrogen derived from a renewable energy resource. 'Renewable energy resource does not include peat, a fossil fuel, or nuclear energy resource.

The first question we address is whether the Commission is authorized to develop and implement regulatory programs for renewable energy resources that are not adequately covered by an existing regulatory program? The answer is yes; the Legislature has conferred upon the Commission the express authority to develop protective standards to be applied to renewable energy technologies and facilities and, to the extent the technologies and facilities are not adequately covered by existing regulatory programs, to establish new regulatory programs to implement the protective standards. The new statutory language says so in so many words.

Based upon the plain meaning of the amendment and the intent of the Legislature that the statute be read broadly to achieve its remedial purpose, the Commission is to establish standards to protect the environment, natural and cultural resources, and the public health, safety or welfare from possible harm from facilities employing renewable energy technologies and, to the extent the technologies' environmental impacts fall outside of the existing regulatory programs for water and air pollution abatement and control, to design an environmental regulatory program to implement protective standards adopted by the Commission.

The Commission exercises its pre-existing authority to control and abate pollution of the water and air resources principally by establishing air and water quality standards and by issuing permits with appropriate and enforceable conditions. N.C.G.S. §§ 143-214.1, -215, -215.107 and -215.108. N.C.G.S. § 143-211(c) provides that "[s]tandards of water and air purity shall be designed to protect human health, to prevent injury to plant and animal life, to prevent damage to public and private property to ensure the continued enjoyment of the natural attractions of the State, . . . and to secure for the people of North Carolina, now and in the future, the beneficial uses of these great natural resources." The Commission's pre-existing air pollution control program will likely address the air pollution emissions from facilities utilizing biomass combustion renewable energy resources

and the water pollution control and dam safety programs will likely address the public health and safety and point and non-point discharges of pollutants to the State's surface waters and groundwater associated with renewable energy facilities, as defined in Senate Bill 3. If the Commission's evaluations of renewable energy resources and technologies find gaps in the coverage provided by the existing water or air quality standards or permitting requirements, the Commission's present statutory authority will allow it to adopt rules to provide the necessary corrections and protective standards for coverage by these existing regulatory programs.

Wind turbine, solar, geothermal, ocean current and wave energy are renewable energy resources that may not be adequately covered by existing regulatory programs. To provide the protection of the State's extensive resources intended by the statute may require the Commission to develop specific protective standards and regulatory programs to implement these standards. Under the State's current regulatory program structure, these renewable energy resources would be subject to laws and regulations that regulate the development of a particular location, such as buffer and density restrictions, standards for well construction, stormwater treatment and control requirements, and activities permitted in CAMA areas of environmental concern. Additionally, the location and operation of renewable energy facilities would not appear to be subject to regulation by the State's marine fisheries and wildlife agencies; these agencies' regulatory programs generally apply only to persons engaged in activities associated with "taking" the resource. The agencies regulating wildlife and marine fisheries can only indirectly influence the location and operation of a renewable energy facility by commenting upon potential impacts on the fisheries and wildlife resources during the CAMA, air or water pollution control permitting processes or, where available, the environmental impact statement process. By the plain wording of Section 2.(c) in Senate Bill 3 it appears that the Legislature intended, in these limited situations where there is no existing regulatory program to address the potential for renewable energy technologies to harm the State's natural and cultural resources and the health and safety of its citizens, for the Commission to establish protective standards and an environmental regulatory program to ensure that no harm results from the location and operation of such facilities to the "environment, natural resources, cultural resources, or public health, safety, or welfare of the State."

Before leaving this subject, we address a point that might be raised that the authorization to address renewable energy resources is contained in a paragraph in subsection (a) of N.C.G.S. § 143B-282, which begins with these words:

"(a) There is hereby created the Environmental Management Commission of the Department of Environment and Natural Resources with the power and duty to promulgate rules to be followed in the protection, preservation, and enhancement of the water and air resources of the State."

Wind turbine, ocean current and wave energy all appear to fall comfortably within the broad parameters of the term "water and air resources of the State." On the other hand, it might be argued that solar and geothermal energy resources do not fall within the scope of water and air resources of the State. However, we believe that the General Assembly's express authorization that the

Commission "evaluat[e] renewable energy technologies that are, or are proposed to be, employed as part of a renewable energy facility" without express exception from those statutorily defined terms, reveals the General Assembly's intent better than its placement in Section 143B-282.

You also have asked whether the protective standards developed for a new regulatory program may be implemented through a permitting procedure? Our answer is "Yes."

In conferring upon the Commission the authority to adopt protective standards and, where a regulatory program does not exist, to establish "an environmental regulatory program" to implement the standards, it appears the Legislature intended to authorize the Commission to create a protective regulatory program with standards and permitting components similar to those contained in the existing dam safety and water and air pollution control programs. Applying the principle that the meanings of statutes "are to be found in what they necessarily imply as much as in what they specifically express," *Iredell Co. Board of Education v. Dickson*, 235 N. C. 359, 361 (1952), a more restrictive reading of the broad authority of Section 2.(c) of Senate Bill 3 would impair the express purpose of the statute to ensure that renewable energy technologies do not harm the environment, natural resources, cultural resources, or public health, safety, or welfare of the State. *Electric Supply Co. v. Swain Electrical Co.*, 328 N.C. 651, 656 (1971). Without implied authority² to incorporate into an environmental regulatory program a permitting procedure to identify covered technologies and facilities and to notify these facilities of the applicable protective standards and limitations, the Commission would be incapable of accomplishing the Legislature's goal of ensuring that renewable energy technologies do not harm the State's environmental and cultural resources and the public health, safety or welfare. As is true for the existing environmental regulatory programs, the scope of any new environmental regulatory program may extend only as far as the areas covered by the authority conferred on the Commission by the Legislature.

In summary, the State's existing air and water pollution control and safety programs will address the emission and discharge of pollution from the renewable energy resources identified in Senate Bill 3 and, to a limited extent, the siting of such facilities. The Commission can adopt rules and create new permits in order to fill gaps in existing regulatory programs. Section 2.(c) of Senate Bill 3 amends N.C.G.S. § 143B-282 to give the Commission broader authority to establish protective standards for renewable energy resources and a program to implement the standards, and to evaluate renewable energy technologies using the standards. An environmental regulatory program developed pursuant to Section 2.(c) of Senate Bill 3 may extend only as far as the power and authority conferred upon the Commission by constitution, statute, or other legislative enactment.

We trust that the foregoing response has answered the questions and that this discussion of the Commission's powers and authority will assist the Committee as it develops its recommendations for implementing Senate Bill 3.

² In addition to express powers, administrative agencies have implied powers reasonably necessary for the proper execution of their express purposes. *In re A Declaratory Ruling by the N.C. Comm'r of Ins.*, 134 N.C. App. 22, 26 (1999)

APPENDIX III

MEMORANDUM BY NC DENR ON EXISTING STATE STATUTES APPLICABLE TO WIND ENERGY FACILITIES




North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

TO: Renewable Energy Committee (EMC)

FROM: Robin W. Smith 
Assistant Secretary for Environment

RE: Regulation of Wind Energy Facilities

DATE: November 12, 2008

Attached is an outline of existing state laws that may apply to construction of wind energy facilities. The coastal area and mountain ridges offer the most potential for development of utility-scale wind energy development. In the coastal counties, the greatest potential for wind energy development would be offshore or on the narrow band of shoreline within 10-12 miles of the coastal sounds. Large wind energy facilities are not likely to be proposed in the piedmont or in the interior of the coastal counties. As a result, the potential for utility-scale wind energy projects --and corresponding need for environmental review --involves two very distinct and geographically separate areas of the state

In the 20 coastal counties, the Coastal Area Management Act (CAMA) could provide a comprehensive environmental review of proposed wind energy development projects, although some gaps in permit coverage would need to be addressed. There is not a program of comparable scope in the mountains. There, the scope of the environmental review would depend on the potential to impact particular natural resources. Permits would be required to the extent construction or operation of the project triggered a permit under existing water and air quality programs.

STATE LAWS POTENTIALLY AFFECTING CONSTRUCTION OF WIND ENERGY FACILITIES

I. COASTAL AREA MANAGEMENT ACT (CAMA) N.C.G.S. 113A-100, et seq. The Coastal Area Management Act gives the Coastal Resources Commission authority to develop standards for coastal development activities and requires a CAMA permit for development in designated areas of environmental concern in the 20 coastal counties. CAMA specifically authorizes the Coastal Resources Commission to exercise permitting authority over "key facilities" (defined to include facilities for generation and transmission of energy) in the 20 coastal counties.

The coastal management program has four major components:

Guidelines for coastal development adopted by the CRC. Rules set out the standards and policies applied to development proposals through the CAMA permitting program. The CRC has adopted coastal energy policies; those policies primarily address oil and gas exploration. Both CAMA and rules adopted by the CRC, however, set out development standards that would be applicable to construction of wind turbines and associated infrastructure in the 20 coastal counties.

Designation of areas of environmental concern. CAMA permits are required only for development in areas of environmental concern designated by the CRC. Most AECs have been designated by category – estuarine waters; coastal wetlands; public trust waters (which would include the waters of the Atlantic Ocean to the 3-mile limit of state jurisdiction); ocean and inlet hazard areas (defined by flood hazard zones and inlet hazard area maps); and the shoreline adjacent to estuarine and public trust waters. The width of the shoreline AEC varies depends on the classification of the adjacent waters.

The law also authorizes the CRC to designate any area that is or may be impacted by a "key facility" as an AEC. The term "key facilities" refers to public infrastructure projects and to "[m]ajor facilities on nonfederal lands for the development, generation, and transmission of energy".

Local land use plans adopted by coastal cities and counties. The 20 coastal counties are required to have a county-wide land use plan. An incorporated city or town can develop the land use plan provisions for areas within its planning jurisdiction. CAMA prohibits issuance of a CAMA permit for a project that is inconsistent with the local land use plan. As a result, local land use plans become part of the CAMA permit review.

Federal consistency review. Under the federal Coastal Zone Management Act a federal activity in or affecting the state's coastal zone must be consistent with the state's coastal management program to the maximum extent practicable. This federal consistency requirement applies to both federal agency activities and federally permitted activities. Consistency review may be required for an activity that would otherwise be outside the state's CAMA permitting jurisdiction. For example, consistency review is required for a federal activity beyond the 3-mile limit of state jurisdiction in the Atlantic Ocean if the activity affects resources in the state's coastal zone. In consistency review, the state can only apply mandatory, enforceable policies that have been approved as part of the state's coastal management program (CAMA, rules adopted by the CRC under CAMA, and the coastal land use plans).

G.S. 113A-120, which sets out the standards for grant or denial of CAMA permits, requires denial of the permit based on: significant impacts to coastal wetlands and estuarine waters; loss of long-term productivity of certain coastal resources; major damage to historic, cultural, scientific, or other values; interference with public trust rights to use navigable waters; and location in a natural hazard area (such as the ocean beach or inlet shoreline) in a manner that unreasonably endangers life or property. In addition to the general standards for permit denial, the statute requires denial of a permit for a "key facility", including an energy-related activity, if the CRC finds that "the development is inconsistent with the State guidelines [for coastal development] or the local land use plans."

CAMA statutes and rules do not specifically address wind turbines, but the general coastal development standards that apply to all projects requiring a CAMA permit would allow the CRC to consider impacts on fisheries resources, wildlife, important cultural and archaeological resources, public use of the waters and other coastal resources in reviewing a permit application for a wind facility. Some existing CAMA rules could pose an immediate obstacle to wind generation and transmission infrastructure – particularly in coastal waters. For example, the oceanfront setback rules would likely have to be amended to allow transmission lines for offshore wind energy to cross the ocean beach.

CAMA rules also strictly limit development activities in coastal wetlands (defined to be the regularly and irregularly flooded tidal marshes), estuarine waters and other public trust waters. The rules applicable to development in waters and wetlands currently prohibit structures that are not water-dependent. Under the rules, a structure is considered to be water dependent if it must be located in or over the water to serve its intended purpose.

The CRC's authority to regulate energy facilities under the CAMA permit program is limited in one respect. CAMA exempts construction of facilities for the development, generation, and transmission of energy from CAMA permit requirements to the extent that that "the activities are regulated by other law or by present or future rules of the State Utilities Commission regulating the siting of such facilities (including the environmental

aspects of such siting), and work on facilities used directly in connection with the above facilities”.

Summary: A CAMA permit would be required for construction of a wind turbine and associated transmission infrastructure in coastal waters, coastal wetlands and in the existing shoreline areas of environmental concern. The CRC also has the authority to expand its permitting jurisdiction by designating an AEC category specifically for areas potentially impacted by energy facilities. CAMA development standards are broad enough to allow the CRC to fully consider the impacts of a wind generation or transmission facility on coastal resources. In the absence of either a variance or rule amendments, the current CAMA regulatory program could be a barrier to off-shore wind turbines. CAMA also provides a way to consider local government land use policies with respect to wind energy facilities as part of the state permitting process. Enforceable policies that become part of the state's federally approved coastal management program can also be used to review federal projects – including projects located outside the state's coastal zone.

II. MOUNTAIN RIDGE PROTECTION ACT N.C.G.S. 113A-205, et seq

The Mountain Ridge Protection Act regulates construction of tall structures on certain mountain ridges (those with elevations of 3,000 feet and 500 feet or more above the adjacent valley floor). The Act authorizes cities and counties to adopt ordinances regulating the construction of tall buildings or structures on protected mountain ridges and requiring permits prior to construction.

Local ordinances must require denial of the permit unless the applicant can demonstrate that the project:

1. Will be served by a sewer system that meets state and federal standards;
2. Has a water supply system that meets state standards and is adequate for fire protection and drinking water supply;
3. Complies with state and local sedimentation control requirements; and
4. Complies with local standards for protection of the natural beauty of the mountains.

If a city or county failed to adopt a local ordinance by January 1, 1984, G.S. 113A-209 prohibits construction of any tall building or structure on a protected mountain ridge.

It is not clear that the Mountain Ridge Protection Act applies to wind turbines. The Act defines “tall buildings or structures” in a way that specifically excludes:

- a. Water, radio, telephone or television towers or any equipment for the transmission of electricity or communications or both.

- b. Structures of a relatively slender nature and minor vertical projections of a parent building, including chimneys, flagpoles, flues, spires, steeples, belfries, cupolas, antennas, poles, wires, or windmills.
- c. Buildings and structures designated as National Historic Sites on the National Archives Registry.

N.C.G.S. § 113A-206(3). [Emphasis added]

By excluding "structures of a relatively slender nature...including windmills" from the definition of "tall buildings or structure", the Act appears to exempt windmills from regulation. A wind turbine constructed by the U.S. Department of Energy and NASA operated on Howard's Knob, just north of Boone, at the time the General Assembly debated the Mountain Ridge Protection Act. Nothing in the history of the Act (which was prompted by construction of a large condominium project) suggests a legislative intent to prohibit wind energy generation on mountain ridges.

III. NORTH CAROLINA UTILITIES COMMISSION

Construction of wind turbines for purposes of generating electric power to supply the public requires a certificate of convenience and necessity from the North Carolina Utilities Commission if the facility exceeds two megawatts in capacity. G.S. 62-110.1. The law does not identify environmental impacts as a factor in granting or denying a certificate. The Utilities Commission also has authority to regulate the siting of transmission lines. N.C.G.S. 62-101. In making a siting decision, the Utilities Commission is to consider "environmental compatibility and public convenience and necessity".

An application for a transmission line certificate must include a report on the environmental impacts of the proposed transmission line, including a description of mitigating measures and alternatives. Notice of the application must be served on several state agencies (including DENR), the county through which the transmission line will be constructed and any municipality affected by construction of the line. G.S. 62-102. To approve a transmission line certificate, the Commission must find:

That the impact the proposed transmission line will have on the environment is justified considering the state of available technology, the nature and economics of the various alternatives, and other material considerations[.]

G.S. 62-105(a)(4).

The law does not preempt other state environmental laws. It does provide for preemption of local ordinances in some circumstances. Within 30 days after receiving notice of an application for a transmission line certificate, a city or county that would be affected by the line must provide both the Utilities Commission and the applicant with a copy of any local ordinance that would apply to the construction. If a city or county fails to provide

notice of the ordinance, the ordinance cannot be enforced with respect to the proposed line. The Utilities Commission can also preempt a local ordinance at the applicant's request if it finds "that the greater public interest requires it". G.S. 62-106. (The city or county has opportunity to participate in the Utilities Commission proceeding on a preemption request.)

IV. MISCELLANEOUS

Sedimentation Pollution Control Act. (G.S. 113A-50, et seq.). Construction of a wind energy facility would likely require a sedimentation and erosion control plan under the Sedimentation Act and a construction stormwater permit from the Division of Water Quality.

Clean Water Act. Construction impacts on surface waters and wetlands would be addressed by the existing Clean Water Act permitting process. Filling of waters or wetlands could require both a § 404 permit from the U.S. Army Corps of Engineers and a state water quality certification. Depending on the location of the project, it may also require a stormwater permit.

Endangered Species Act. In areas that provide habitat for federally listed threatened or endangered species, consultation with the United States Fish and Wildlife Service may be required.

The State Environmental Policy Act (G.S. 113A-1, et seq.) requires the preparation of an environmental impact statement for any state action (such as issuance of a permit) that involves use of public money or use of public land. In the absence of local, state or federal funding for a wind turbine project, the requirement for an EIS would be triggered only if the project was constructed on state lands – including state-owned submerged lands under coastal waters. Off-shore wind turbines would likely trigger an EIS based on the impacts to state-owned submerged lands.

V. SESSION LAW 2007-397 (S 3, Promote Renewable Energy/Energy Efficiency)

Legislation creating a renewable energy portfolio standard for North Carolina electric utilities included two environmental provisions.

Section 2(a) addresses air emissions from renewable energy resources, requiring BACT for biomass combustion sources

Section 2 (c) amended G.S. 143B-282(a) to give the Environmental Management Commission authority to:

establish a procedure for evaluating renewable energy technologies that are, or are proposed to be, employed as part of a renewable energy facility, as defined in G.S. 62-133.8; establish standards to ensure that renewable energy technologies

do not harm the environment, natural resources, cultural resources, or public health, safety, or welfare of the State; and, to the extent that there is not an environmental regulatory program, establish an environmental regulatory program to implement these protective standards.

The provision limits the EMC's authority to create a new environmental regulatory program for renewable energy technologies to circumstances in which no existing environmental regulatory program exists.

APPENDIX IV

NORTH CAROLINA ATTORNEY GENERAL'S LETTER ON INTERPRETATION OF MOUNTAIN RIDGE PROTECTION ACT



State of North Carolina

Roy Cooper
Attorney General

February 4, 2002

Ms. Anita Rose
Tennessee Valley Authority
P.O. Box 1649
Norris, TN 37828

Transmission by U.S. Mail, facsimile to (865) 632-1493
and e-mail: akrose@tva.gov

Re: Environmental Assessment for the 20-MW Windfarm and Associated Energy Storage System Facility

Dear Ms. Rose:

I am making these comments on behalf of the State of North Carolina in my capacity as North Carolina's Attorney General. The State of North Carolina is pleased that TVA is considering wind-generated electricity alternatives. Like TVA, we are very interested in protecting the quality of our air and believe it is important to explore alternative ways to provide and conserve energy while pursuing that goal. It is, of course, also important when evaluating various alternatives in pursuit of this goal to balance them wisely with other important public values and concerns. It is mainly for this purpose that I write.

Unfortunately, the Environmental Assessment ("EA") has misinterpreted North Carolina's public policy with regard to mountain ridge top protection as set forth in "North Carolina Mountain Ridge Protection Act of 1983" N.C. Gen. Stat. §§ 113A-205 et seq. This public policy should be given due consideration and weight, because the Stone Mountain site is almost on the Tennessee-North Carolina border, and the EA itself concludes that "construction and operation of the [Stone Mountain] windfarm facilities would permanently alter the visual landscape character resulting in a significant [adverse] visual impact [in Watauga County, North Carolina,]" and "would create substantial visual discord and adverse contrast while reducing scenic attractiveness and tranquillity." (EA 4-30, 4-31).

The North Carolina Mountain Ridge Protection Act of 1983 N.C. Gen. Stat. §§ 113A-205 et seq. (1999)), prohibits the construction of buildings or structures over 40 feet tall on protected mountain ridges in North Carolina. According to the EA, "The North Carolina Act specifically excludes structures of a slender nature from being considered "tall buildings or structures"

Ms. Anita Rose
February 5, 2002
Page 2

regulated under the act." (EA 3-43) Apart from noting, correctly, that the windfarm will not actually be in North Carolina, this brief discussion is the EA's entire analysis of the North Carolina policy. It implies clearly, but incorrectly, that the North Carolina Mountain Ridge Protection Act would permit construction of the proposed windfarm in North Carolina. This is not the case.

The North Carolina Act must be interpreted in light of its purposes. These include the legislative finding that "Tall or major buildings and structures located on ridges are a hazard to air navigation and persons on the ground and detract from the natural beauty of the mountains." N.C. Gen. Stat. § 113A-207. In light of these findings, a windfarm such as that proposed here, with 13 to 16 300-foot high towers (including the rotors) with flashing stroboscopic lights, spaced on average 900 feet apart for two miles along the top of a 4400 foot high mountain ridge, cannot properly be construed to fall within the exception for "Structures of a relatively slender nature and minor vertical projections of a parent building, including chimneys, flagpoles, flues, spires, steeples, belfries, cupolas, antennas, poles, wires, or windmills." N.C. Gen. Stat. § 113A-206 (3)(b). The Legislature in 1983 had in mind, the traditional, solitary farm windmill which has long been in use in rural communities, not windfarm turbines of the size, type or certainly number proposed here, especially when "*all the turbines would probably be seen together from most viewing locations.*" (EA 4-31)

The North Carolina Mountain Ridge Protection Act also has an exception for "any equipment for the transmission of electricity or communications or both," much like the Johnson County Act. N.C. Gen. Stat. § 113A-206 (3)(a). However, this exception would not apply to the proposed windfarm. The proposed windfarm would clearly be a "generating" facility. Traditionally, electricity generation and electricity transmission are viewed as distinct and separate concepts and functions.

Indeed, separate certificates from our Utilities Commission are required for construction of electric transmitting lines and electric generating facilities. N.C. Gen. Stat. § 62-110; N.C. Gen. Stat. § 62-110.1. We believe that no interpretation of N.C. Gen. Stat. § 113A-206 (3)(a) is required. The windfarm would not be included within the exception by the plain meaning of the word "transmission." However, even if one were to conclude that there was some ambiguity requiring interpretation, we see no basis in this statute to read "transmission" more broadly. It is easy to see why the legislature would wish to make an exception for transmission lines which typically run up one side of a ridge, over the top at one point and down the other side. Such lines do relatively little to interfere with the beauty and integrity of a ridge line or create a potential safety hazard. The windfarm proposed here is a far cry from such a minimal intrusion.

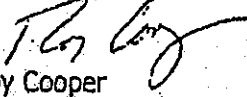
The EA may well be correct that The Mountain Ridge Protection Act of Johnson County appears to be modeled after the North Carolina Mountain Ridge Protection Act and that the definition of protected mountain ridges used in the North Carolina statute is essentially the same as in the Johnson County Act. We do not purport to be experts in Tennessee law. However, for the reasons just mentioned, we question the validity of the EA's conclusion, apparently without analysis, that the exemption for equipment used for the "transmission of electricity" in the Mountain Ridge Protection Act of Johnson County exempts its application to the proposed windfarm "generating"

Ms. Anita Rose
February 5, 2002
Page 3

equipment. We would be surprised if Tennessee law, like North Carolina's and that of most states, generally does not distinguish between electric *generating* facilities and electric *transmission* facilities.

We hope that you will give these comments due consideration and weight when considering the Stone Mountain alternative.¹ Thank you for the opportunity to make these comments on behalf of the State of North Carolina.

Very truly yours,



Roy Cooper

RAC/sm

cc: The Honorable Michael F. Easley, Governor
State of North Carolina
The Honorable William Ross, Secretary
Department of Environment & Natural Resources

¹ We agree with your EA that "Comparing the two proposed locations for the windfarm, [the Stone Mountain] alternative would have greater visual impact due to the undisturbed ridge lines, clear views from the adjacent valleys, closer viewing distances, and absence of other features that disturb the visual harmony of the tranquil countryside." (EA 4-33) The EA makes clear that Buffalo Mountain has been significantly altered already by past strip mining. Beyond that, however, we express no opinion about the merits of the Buffalo Mountain alternative.