

**GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2011**

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SENATE BILL 665*

Short Title: ASU Wind Demonstration Project. (Public)

Sponsors: Senator Hise.

Referred to: Agriculture/Environment/Natural Resources.

April 20, 2011

1 A BILL TO BE ENTITLED
2 AN ACT TO DIRECT APPALACHIAN STATE UNIVERSITY TO JOINTLY DEVELOP
3 AND IMPLEMENT A WIND DEMONSTRATION PROJECT WITH THE HOLDER OF
4 A PERMIT FOR A WIND ENERGY FACILITY THAT HAS BEEN ISSUED BY THE
5 DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES.

6 Whereas, S.L. 2007-398 established a Renewable Energy and Energy Efficiency
7 Portfolio Standard (REPS) to diversify the resources used to reliably meet the energy needs of
8 consumers in the State; and

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

11 Whereas, North Carolina has abundant wind resources in the mountain region; and

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

15 Whereas, the ridges and higher elevations of North Carolina's mountains are
16 invaluable resources of the State that merit the protection that they currently receive under the
17 Mountain Ridge Protection Act of 1983; and

18 Whereas, a demonstration project to develop a wind energy facility in a mountain
19 region within the purview of the Mountain Ridge Protection Act under certain narrowly
20 prescribed criteria would assist in determining whether wind energy can be developed in
21 certain extremely limited portions of the mountain regions that are unsuitable for residential or
22 recreational development and in a manner that is compatible with preserving scenic views and
23 the quality of life that mountain residents and visitors treasure, as well as compatible with
24 environmental protection, sustainable development, and energy independence; and

25 Whereas, Appalachian State University is conducting research on wind energy as
26 part of the University's focus on using alternative energy resources and its goal of being a world
27 leader in sustainability; Now, therefore,

28 The General Assembly of North Carolina enacts:

29 **SECTION 1.** Definitions. – The following definitions apply to this act and its
30 implementation:

- 31 (1) The definitions set out in G.S. 143-212.
32 (2) "Wind energy facility" means the turbines, accessory buildings, transmission
33 facilities, and any other equipment necessary for the operation of the facility
34 that cumulatively, with any other wind energy facility whose turbines are
35 located within one-half mile of one another, have a rated capacity of three
36 megawatts or more of energy.



1 **SECTION 2.** Wind Energy Facility Demonstration Project; General Conditions. –
2 Appalachian State University shall assist a third party in selecting a site for the construction
3 and operation of a wind energy facility demonstration project that does not exceed a rated
4 capacity of 60 megawatts and that satisfies all the criteria in Section 3 of this act. The third
5 party shall apply for and obtain all permits and authorizations necessary to construct, operate,
6 and decommission the wind energy facility demonstration project as required by this act. Any
7 agreement entered into between Appalachian State University and a third party pursuant to this
8 section shall ensure that the University is provided with (i) cooperation and appropriate access
9 to the wind energy facility demonstration project in order to develop and conduct research on
10 the technological, environmental, and economic aspects of the demonstration project and (ii)
11 financial support to cover the full cost of the research contemplated in this section.

12 **SECTION 3.** Wind Energy Facility Demonstration Project; Site Selection. –
13 Notwithstanding Article 14 of Chapter 113A of the General Statutes, the site for a wind energy
14 facility demonstration project shall satisfy all of the following criteria:

15 (a) The proposed site is located in a mountain ridge that is subject to protection under
16 Article 14 of Chapter 113A of the General Statutes.

17 (b) The proposed site is located at least two miles from the Blue Ridge Parkway.

18 (c) The proposed site is located at least two miles from the Appalachian Trail.

19 (d) The proposed site is located within a county that has enacted an ordinance
20 authorizing the siting of the wind energy facility under this demonstration project.

21 (e) The proposed site is unsuitable for future residential or recreational development
22 due to its proximity within one mile of an existing mining operation, waste facility, power
23 plant, or other similar commercial facility that has a permit or license issued by the Department
24 of Environment and Natural Resources.

25 (f) The proposed site is located within 50 miles of Appalachian State University.

26 **SECTION 4.** Wind Energy Facility Demonstration Project; Permitting. – The third
27 party shall not undertake development associated with a wind energy facility demonstration
28 project without first obtaining a permit from the Department of Environment and Natural
29 Resources. The third party applying for a permit for a wind energy facility demonstration
30 project shall include all of the following in an application for the permit:

31 (a) A narrative description of the proposed facility.

32 (b) A map showing the location of the proposed facility.

33 (c) The capacity of proposed energy generation.

34 (d) A copy of a deed, purchase agreement, lease agreement, or other legal instrument
35 demonstrating the right to develop the property.

36 (e) Certification of adjacent property owner notification to the maximum extent
37 practicable.

38 (f) A study of the noise impacts of the proposed facility.

39 (g) A study on shadow flicker impacts of the proposed facility.

40 (h) A study on avian and bat impacts of the proposed facility.

41 (i) A study on viewshed impacts of the proposed facility.

42 (j) An explanation of how the proposed facility would be consistent with the
43 requirements in Section 3 of this act.

44 (k) The application fee required by Section 7 of this act.

45 (l) Other data or information the Department may reasonably require.

46 **SECTION 5.** Criteria for Denial of a Permit Application for a Wind Energy
47 Facility Demonstration Project. – The Department shall deny an application for a permit for a
48 wind energy facility demonstration project if the Department finds any one or more of the
49 following:

50 (a) Construction or operation of the facility would be inconsistent with or violate rules
51 adopted by the Commission.

1 (b) Construction or operation of the facility would be inconsistent with or violate any
2 applicable local government ordinances.

3 (c) Construction or operation of the facility would result in significant adverse impacts
4 to ecological systems, natural resources, cultural sites, recreation areas, or historic sites of more
5 than local significance, including national or State parks or forests; wilderness areas; historic
6 sites; recreation areas; segments of the natural and scenic rivers system; wildlife refuges;
7 preserves and management areas; areas that provide habitat for threatened or endangered
8 species; and primary nursery areas designated by the Wildlife Resources Commission.

9 (d) Construction or operation of the facility would have a significant adverse impact on
10 fish or wildlife.

11 (e) Construction or operation of the facility would have a significant adverse impact on
12 views from any State or national park, wilderness area, significant natural heritage area as
13 compiled by the North Carolina Natural Heritage Program, or other public lands or private
14 conservation lands designated or dedicated due to their high recreational values.

15 (f) Construction or operation of the facility would interfere with air navigation routes,
16 air traffic control areas, military training routes, or special use airspace.

17 (g) The cumulative impact of the proposed facility with other existing or proposed wind
18 energy facilities would result in significant adverse impacts to ecological systems, natural
19 resources, cultural sites, recreation areas, or historic sites of more than local significance.

20 (h) The proposed facility would be located in an area designated with a slide hazard
21 ranking of "moderate" or "high" on a Stability Index Map prepared by the North Carolina
22 Geological Survey.

23 **SECTION 6.** Wind Energy Facility Demonstration Project; Additional Permit
24 Conditions. – The Department may include the following conditions on a third party that seeks
25 a permit for a wind energy facility demonstration project:

26 (a) A requirement that the third party mitigate any adverse impacts.

27 (b) A requirement that the third party engage Appalachian State University to conduct
28 research on the technological, environmental, and economic aspects of the wind energy facility
29 associated with the demonstration project as proposed and constructed at no cost to the
30 University.

31 **SECTION 7.** Permit Fees. – The third party applicant for a permit for a wind
32 energy facility demonstration project under this act shall submit with the application required
33 under Section 4 of this act an application fee of two thousand dollars (\$2,000).

34 **SECTION 8.** Plan for Decommissioning or Removal of Wind Energy Facility
35 Demonstration Project. – The Department shall require the third party applicant for a permit for
36 a wind energy facility demonstration project to provide a plan regarding the action to be taken
37 upon the decommissioning and removal of the demonstration project. The plan shall include an
38 estimate of the cost to decommission and remove the demonstration project. The plan shall also
39 include a proposed description of the condition of the site once the demonstration project has
40 been decommissioned and removed. The Department may require a bond, guarantee, insurance,
41 or other financial instrument to provide for decommissioning and removal of any structures that
42 comprise the demonstration project. The Department shall consider the size of the
43 demonstration project, the location of the project, and the financial qualifications of the
44 applicant in making its determination to grant or deny the permit.

45 **SECTION 9.** Public Hearing. – The Department shall hold a public hearing in the
46 county or counties in which the proposed wind energy facility demonstration project is to be
47 located within 75 days of receipt of a completed application for a demonstration project. The
48 Department shall give a minimum of 30 days' notice of the public hearing. The Department
49 shall make a final decision on a permit application within 150 days following receipt of a
50 completed application. If the Department determines that an application for a demonstration
51 project fails to meet the requirements for a permit under this section, the Department shall deny

1 the application, and the application shall be returned to the applicant accompanied by a written
2 statement of the reasons for the denial. If the Department fails to act within any time period set
3 forth in this section, the applicant may treat the failure to act as a denial of the permit and may
4 challenge the denial as provided under Chapter 150B of the General Statutes.

5 **SECTION 10.** Other Applicable Laws. – The issuance of a permit under this
6 section shall not obviate the need for the third party applicant to obtain any and all other
7 applicable local, State, or federal permits, licenses, or approvals.

8 **SECTION 11.** Rule making. – The Department may adopt rules implementing this
9 section.

10 **SECTION 12.** Penalties. – The Secretary of Environment and Natural Resources
11 may impose an administrative penalty on a person who constructs a wind energy facility
12 without obtaining a permit under this section or who constructs or operates a wind energy
13 facility demonstration project in violation of its permit terms and conditions. Each day of a
14 continuing violation shall constitute a separate violation. The penalty shall not exceed ten
15 thousand dollars (\$10,000) per day. The Secretary of Environment and Natural Resources,
16 irrespective of all other remedies at law, may institute an action for injunctive relief against a
17 person who constructs a wind energy facility demonstration project without obtaining a permit
18 under this section or who constructs or operates a wind energy facility demonstration project in
19 violation of its permit terms and conditions.

20 **SECTION 13.** Local Authority. – Nothing in this act shall be interpreted to limit
21 the ability of a county to plan for and regulate the siting of a wind energy facility demonstration
22 project in accordance with land-use regulations authorized under Chapter 153A of the General
23 Statutes. In developing a plan for regulation of the siting of a wind energy facility
24 demonstration project, a county shall consider the information, factors, and criteria set out in
25 Sections 4 and 5 of this act.

26 **SECTION 14.** Wind Energy Facility Demonstration Project; Commencement of
27 Construction and Commercial Operation. – Upon receipt of permit approval from the
28 Department and any additional authorizations necessary to construct and operate the wind
29 energy facility demonstration project, the third party shall commence construction of the
30 demonstration project. Commercial operation of the demonstration project permitted and
31 authorized pursuant to this act shall commence no later than November 1, 2018.

32 **SECTION 15.** Reports. – In order to determine the effectiveness of the wind
33 energy facility demonstration project permitted and authorized pursuant to this act,
34 Appalachian State University shall report no later than one year after the issuance of the permit,
35 and annually thereafter, to the Department and the Environmental Review Commission of the
36 General Assembly. The first report shall include the location of the site selected for the wind
37 energy facility demonstration project and data on wind speeds and the potential for power
38 generation collected from the demonstration project. Subsequent reports shall also include the
39 power generated at the facility, the extent to which the demonstration project assists in the
40 research on wind energy at the University, and any findings on the technological,
41 environmental, and economic aspects of the demonstration project.

42 **SECTION 16.** This act is effective when it becomes law.