



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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www.ct.gov/csc

December 16, 2011

Lee D. Hoffman
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103

RE: **PETITION NO. 984** - BNE Energy, Inc. petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of a 4.8 MW Wind Renewable Generating facility located on Winsted-Norfolk Road (Route 44), Colebrook, Connecticut.

Dear Attorney Hoffman:

At a public meeting of the Connecticut Siting Council (Council) held on December 15, 2011, the Council considered and approved the Development and Management (D&M) Plan submitted for this project on October 21, 2011 with the following conditions:

- BNE shall conduct long-term noise monitoring at two locations, which are identified as locations M3 and M4 in Figure 1 Wind Colebrook North Noise Monitoring and Receptor Locations submitted as part of BNE's responses to the second set of CSC interrogatories dated November 29, 2011;
- Should blasting be required for the project, BNE shall follow the Controlled Blasting specifications (Section 02211) included as Exhibit 2 of the pre-filed testimony of Douglas Roy, dated March 24, 2011;
- BNE shall formalize the conservation plan in accordance with C.G.S. Chapter 822 Easements and Restrictions, within 90 days of the date of the D&M decision letter. A copy shall be provided to the Council and shall be reviewed and approved by staff. Any request for an extension shall be submitted to the Council in writing for approval. The formal conservation restriction shall remove horseback riding, mountain biking, and timber harvesting as permitted uses. BNE shall record the conservation restriction, including a map showing the limits of the conservation area, on the Land Records of the Town of Colebrook during the time it maintains a lease on the project property;
- BNE shall conduct all reconstruction work on Rock Hall Road in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and with the 2004 DEP Stormwater Quality Manual and shall obtain all necessary permits before the commencement of any reconstruction work. BNE shall set aside \$40,000 in an escrow account for the Town that shall be reserved for repairing any damage to the reconstructed Rock Hall Road by heavy equipment traveling to and from the site;
- BNE shall follow best management practices for any necessary dewatering activities at the site and that these activities be included in reports of its third party environmental inspector.

- BNE shall allow Town officials access to the site for inspection of Erosion & Sedimentation controls with any resulting recommendations to be considered by the on-site contractor and BNE's Environmental Inspector;
- BNE shall submit to the Council any changes to its Stormwater Management Plan as required by DEEP permitting requirements; if applicable;
- BNE shall submit the final foundation design plans prior to installation of the turbine foundations;
- BNE shall incorporate the proposed decommissioning specifications, "Proposed Decommissioning Specifications for Wind Colebrook South and Wind Colebrook North," included in the Pre-Filed Testimony of John Stamberg dated March 15, 2011 submitted by the Town of Colebrook as part of its Decommissioning Plan.
- BNE shall provide the Council with the location of the proposed fencing and signage related to ice throw and ice drop and an explanation of how these locations were determined within 30 days of the date of the Development and Management (D&M) Plan decision letter.
- BNE shall provide to the Council a copy of any Host Community Agreement it reaches with the Town of Colebrook.
- BNE shall submit to the Council a copy of the Development and Management Plan certified by a Professional Engineer, duly licensed in the State of Connecticut within 30 days of the date of the Development and Management (D&M) Plan decision letter.

This approval applies only to the D&M Plan submitted on October 21, 2011. Any changes to the D&M Plan require advance Council notification and approval.

Please be advised that deviations from this plan are enforceable under the provisions of the Connecticut General Statutes § 16-50u. Enclosed is a copy of the staff report on this D&M Plan, dated December 15, 2011.

Thank you for your attention and cooperation.

Very truly yours,



Linda Roberts
Executive Director

LR/CDM/jbw

Enclosure: Staff Report, dated December 15, 2011

c: Parties and Intervenors

The Honorable Thomas D. McKeon, First Selectman, Town of Colebrook
Karen Griswold Nelson, Zoning Enforcement Officer, Town of Colebrook

LIST OF PARTIES AND INTERVENORS
SERVICE LIST

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Petitioner	<input checked="" type="checkbox"/> U.S. Mail	BNE Energy, Inc. Town Center, Suite 200 29 South Main Street West Hartford, CT 06107 http://bneenergy.com/	Lee D. Hoffman Pullman & Comley, LLC 90 State House Square Hartford, CT 06103 lhoffman@pullcom.com Paul Corey, Chairman BNE Energy Inc. Town Center, Suite 200 29 South Main Street West Hartford, CT 06107 (860) 561-5101 (888) 891-6450 fax pcorey@bneenergy.com
Party <i>(granted on 01/20/11)</i> Party <i>(granted on 01/20/11)</i> Party <i>(granted on 01/20/11)</i>	<input checked="" type="checkbox"/> E-Mail	Stella and Michael Somers 19 Rock Hall Road Colebrook, CT 06021 Susan Wagner 117 Pinney Street Colebrook, CT 06021 (Residence) Mailing: P.O. Box 118 Norfolk, CT 06058-0118 FairwindCT, Inc. P.O. Box 225 Colebrook, CT 06021 (860) 379-6425 info@fairwindct.com	Nicholas J. Harding Emily A. Gianquinto Reid and Riege, P.C. One Financial Plaza, 21 st Floor Hartford, CT 06103 (860) 240-1011 (860) 240-1025 nharding@rrlawpc.com egianquinto@rrlawpc.com
Party <i>(granted on 01/20/11)</i>	<input checked="" type="checkbox"/> U.S. Mail	Jeffrey and Mary Stauffer 21 Brightwood Drive Woodbridge, CT 06525 (203) 410-3433 Maryhubbard86@gmail.com	

<p>Party <i>(granted on 01/20/11)</i></p>	<p><input checked="" type="checkbox"/> U.S. Mail</p> <p><input checked="" type="checkbox"/> U.S. Mail</p>	<p>Town of Colebrook</p>	<p>The Honorable Thomas D. McKeon First Selectman Town of Colebrook Town Hall 562 Colebrook Road P.O. Box 5 Colebrook, CT 06021 (860) 379-3359 x202 (860) 379-7215 tommckeon@colebrooktownhall.org</p> <p>David M. Cusick Howd, Lavieri & Finch, LLP 682 Main Street Winsted, CT 06098 (860) 379-2761 x22 (860) 738-3493 fax dmc@hlf.com</p>
<p>Party <i>(granted on 01/20/11)</i></p>	<p><input checked="" type="checkbox"/> U.S. Mail</p>	<p>Kristin M. Mow Benjamin C. Mow 12A Greenwoods Turnpike Colebrook, CT 06021 (860) 738-0060 kmow@hec-global.com</p>	<p>Richard T. Roznoy, Esq. Attorney at Law 11 School Street P.O. Box 850 East Granby, CT 06026 (860) 844-8769 (860) 874-4131 cell (860) 653-2221 fax RTR@RoznoyLaw.com</p>
<p>Intervenor <i>(granted on 01/20/11)</i></p>	<p><input checked="" type="checkbox"/> E-Mail</p> <p><input checked="" type="checkbox"/> E-Mail</p> <p><input checked="" type="checkbox"/> E-Mail</p>	<p>The Connecticut Light and Power Company</p>	<p>John R. Morissette Manager – Transmission Siting and Permitting Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-2036 (860) 665-6933 fax morisjr@nu.com</p> <p>Christopher R. Bernard Manager, Regulatory Policy (Transmission) The Connecticut Light and Power Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5967 (860) 665-3314 fax bernacr@nu.com</p> <p>Joaquina Borges King Senior Counsel</p>

			Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-3678 (860) 665-5504 fax
Party (approved on 02/8/11)	<input checked="" type="checkbox"/> U.S. Mail	David R. Lawrence, MD Jeannie Lemelin, LPN 30 Flagg Hill Road Colebrook, CT 06021 wnstddoc@yahoo.com	
Party (approved 02/08/2011) Party (approved on 03/17/2011)	<input checked="" type="checkbox"/> U.S. Mail	Walter M. Zima 12B Greenwood Turnpike Colebrook, CT 06021 (860) 379-5620 blkmgrant@yahoo.com Mailing: 12B Greenwood Turnpike Winsted, CT 06098	Brandy Grant 12B Greenwood Turnpike Colebrook, CT 06021 (860) 379-5620 blkmgrant@yahoo.com Mailing: 12B Greenwood Turnpike Winsted, CT 06098
Party (approved on 03/17/2011)	<input checked="" type="checkbox"/> U.S. Mail	Eva Villanova 28 Flagg Hill Road Colebrook, CT 06021 evaraku@aol.com Mailing: 134 Forest Avenue Winsted, CT 06098	

PETITION NO. 984 - BNE Energy, Inc. petition for a }
declaratory ruling that no Certificate of Environmental }
Compatibility and Public Need is required for the construction, }
maintenance, and operation of a 4.8 MW Wind Renewable }
Generating facility located on Winsted-Norfolk Road (Route 44), }
Colebrook, Connecticut.

Connecticut

Siting

Council

December 15, 2011

Development and Management Plan Staff Report

On June 9, 2011, the Connecticut Siting Council (Council) issued a Declaratory Ruling to BNE Energy, Inc. (BNE) that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of a 4.8 megawatt (MW) wind renewable generating facility located on Winsted-Norfolk Road (Route 44), Colebrook, Connecticut. As required in the Council's Decision and Order, BNE submitted a Development and Management (D&M) Plan for this project on October 21, 2011. BNE's project includes the construction and installation of three, 80-meter tall GE 1.6 MW wind turbines on a 124.9 acre parcel located at the intersection of Route 44 (Winsted-Norfolk Road) and Rock Hall Road. Sections of the D&M Plan submitted correspond to conditions contained in Paragraph 2 of the Council's Decision and Order dated June 9, 2011.

- a. **A detailed site plan showing the placement and/or extent of vegetative clearing, grading, wetland buffers, access roads, turbine foundations, building specifications, equipment and material laydown and staging areas. Wind Turbine 3 shall have a location and/or rotor diameter that ensures rotating turbine blades would be confined to the host property;**

BNE has submitted a set of drawings that include: the boundaries of the property on which its project will be located; the limits of clearing to be done for the project; the overall site plan with sheets depicting the development of wind turbine sites 1, 2, and 3; construction and post-construction grading plans; the erosion and sedimentation control plan; plans and profiles of the project's access roads; storm drainage profiles; electrical diagrams; narratives describing erosion controls and restoration activities; and detail drawings of erosion controls and stormwater management installations.

BNE's plans call for the clearing of 14.63 acres of the property's total area of 125 acres.

The drawings also show the limits of the proposed 40-acre conservation area; the wetland limits, as well as the 100-foot wetlands review area; and the limits of the 100-year flood plain. In response to an interrogatory, BNE submitted a drawing that showed the blade sweep radius of wind turbine 3 clearing the nearest property line by 9.5 feet.

b. Provide an open space and conservation plan to protect environmentally-sensitive areas of the property for the life of the project;

BNE proposes to set aside a 40-acre area that would be protected from all but passive recreation activities and timber harvesting. This area would encompass most of the wetland areas associated with Mill Brook that traverses the property.

Staff is concerned that the conservation plan, as proposed, would permit recreational activities such as horseback riding and mountain biking that would be detrimental to the area being protected and places no limitation on harvesting timber for forest products.

Staff Recommendations: Staff recommends that horseback riding, mountain biking, and timber harvesting be excluded from activities permitted within the conservation area and that documents depicting the boundaries of the conservation area and that a document enumerating the use restrictions pertaining to this area and a map delineating the extent of the conservation area be recorded on the Town of Colebrook land records for the duration of BNE's lease on this property.

c. Details for the modification and restoration of Town infrastructure affected by the project including a pre-construction survey, protections during construction, post construction survey, and restoration plan to render affected infrastructure to pre-project conditions or better;

BNE filed a Report on Need for Town Infrastructure Improvements, which recommends the reconstruction of 1,500 feet of Rock Hall Road to enable the road to support the equipment that would be using the road during the project's construction. The road would be built according to CT DOT specifications and would be inspected prior to its use by construction equipment and after construction is completed. BNE would reconstruct the necessary portion of Rock Hall Road before bringing any heavy construction equipment to the site and would remediate any damage to the reconstructed road caused during the project's construction.

BNE proposes setting aside \$40,000 in an escrow account for the Town to ensure the repair of any damage caused to the reconstructed Rock Hall Road by heavy construction equipment traveling to and from the Wind Colebrook North site.

Staff Recommendation: Staff recommends accepting BNE's offer of a \$40,000 escrow account.

d. An erosion and sediment control plan, consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (E&S Guidelines), as amended. The plan shall contain a narrative that specifies how the plan complies with the E&S Guidelines;

BNE did include an Erosion and Sediment Control Plan, stamped by a Professional Engineer, as part of its D&M submissions. The plan describes existing conditions including soil types present on the property, general drainage patterns, the types of vegetative habitats present, and the site features that need to be protected. It also includes summaries of

erosion control activities that would be part of the project and best management practices that would be employed. It does not set out a specific construction schedule.

The E&S Plan incorporates the same erosion control drawings and narrative and detail sheets that are included in the full set of project plans. It also includes the drainage calculations used to design the stormwater control features.

In a letter dated December 14, 2011, BNE stated that it was unsure of the extent dewatering would be necessary but committed to following best management practices for dewatering should it be necessary.

Staff Recommendations: Staff recommends that BNE follow best management practices for any necessary dewatering activities at the site and that these activities be included in reports of its third party environmental inspector. Staff also recommends that BNE allow Town officials access to the site for inspection of Erosion & Sedimentation controls with any resulting recommendations to be considered by the on-site contractor and BNE's Environmental Inspector.

e. Stormwater Management Plan, consistent with the 2004 DEP Stormwater Quality Manual;

A Stormwater Management Plan with Stormwater Pollution Prevention Plan (SWPPP), stamped by a Professional Engineer, is included among BNE's D&M submissions. These plans contain much of the same information as the Erosion and Sedimentation Control Plan. In addition, they include supporting drainage calculations.

Staff Recommendation: Staff recommends that any changes to the Stormwater Management Plan based on DEEP permitting requirements shall be submitted to the Council.

f. Drainage Calculations for site development consistent with the 2000 Connecticut Department of Transportation Drainage Manual;

Drainage calculations are included in Appendix K of the Stormwater Management Plan. The drainage calculations are consistent with the methodologies provided in the DOT Drainage Manual.

g. Provisions for crossing Mill Brook (Wetland 1) that relocates the access road onto the old woods road where seepage areas from intermittent watercourses are already channelized, in accordance with the Herpetological Assessment dated May 1, 2011 (Klemens);

The access road to Wind Turbines 2 and 3 has been re-aligned with the old woods road as was recommended by Dr. Klemens during the public hearings on this petition and required by the Decision and Order. Where the access road crosses two existing watercourses, BNE would install oversized, three-sided box culverts that would allow the natural stream bed to be maintained. The culverts would be fenestrated to allow light to reach the stream bed,

which would enhance their utility for wildlife passage. A wetland scientist would be present at the time the culverts are installed to ensure the installation is accomplished in accordance with natural stream crossing standards.

- h. Wood Turtle Protection Plan that includes isolation measures, contractor education, protective measures and an independent third party environmental monitor to ensure proper implementation of the protective measures, in accordance with the Herpetological Assessment dated May 1, 2011 (Klemens);**

BNE's D&M Plan incorporates wood turtle exclusionary fencing to be installed as part of the erosion controls. Dr. Klemens would be retained to conduct third party inspections to ensure the safety of the turtles and other amphibians and reptiles during construction of the project. The project plans call the third party inspector to meet with the contractor prior to any construction activities to discuss protective measures to follow during construction.

- i. Wetland and Wildlife Restoration plan to include provisions for habitat restoration, invasive species control over a three-year period, and the maintenance of permanent meadow areas adjacent to Turbine 1, in accordance with the Herpetological Assessment dated May 1, 2011 (Klemens);**

On behalf of BNE, Vanasse Hangen Brustlin (VHB) has delineated the post-construction restoration measures that would be implemented. Upland disturbed areas would be seeded with the New England Conservation/Wildlife Mix, a native herbaceous seed mixture of grasses, forbs, wildflowers and legumes. Streambanks would be restored under the oversight of a qualified wetland scientist (VHB has been identified by BNE as the party responsible for performing this function). Once they are stabilized, meadow areas would be mowed on an annual basis to prevent trees from taking hold in these areas.

- j. Ice Safety Management plan that includes provisions to mitigate the potential for ice throw and ice drop. The Petitioner shall submit an evaluation regarding the feasibility of installing the optional Winter Ice Operation Mode;**

BNE's Ice Safety Management Plan, submitted as part of the D&M package, calls for continuous monitoring of the wind turbine operations; both remotely by GE from its offices in Schenectady and by BNE personnel on site. During potential icing weather conditions, the turbines would be closely monitored and shut down should icing occur. To help prevent ice throw or ice drop, BNE would employ the Winter Ice Operation Mode. When icing does occur, BNE would shut down the turbines until weather conditions were favorable for the resumption of operations.

Staff Recommendation: Staff recommends that BNE provide the Council with the location of the proposed fencing and signage related to ice throw and ice drop and an explanation of how these locations were determined.

- k. A post-construction noise-monitoring protocol describing locations, frequency and methods to be employed for a post-construction noise study. After Council approval of the noise monitoring protocol, the Petitioner shall conduct the post-construction noise study. Upon review of the subsequent noise study, the Council, in consultation with the DEP, will evaluate and determine if any mitigation measures should be employed, including turbine operations management, to ensure the project complies with DEP noise regulations;**

BNE's D&M Plan includes a short term and long term Noise Monitoring Program to establish and monitor noise levels generated by the wind turbines. BNE proposes to conduct short-term monitoring at three locations: one on Greenwoods Turnpike to the southwest of the project; one on Rock Hall Road to the north of the project, and one on Pinney Street to the east of the project. BNE would conduct long term noise monitoring in the vicinity of the nearest residence on Rock Hall Road to the north of the project.

Noise monitoring equipment would be installed prior to the start of commercial operations to establish existing noise levels. The short term noise monitoring would be initiated within one month of the start of commercial operations and would be conducted for three months. Long term noise monitoring would be conducted for one year. According to an interrogatory response, BNE would include the measurement of infrasound levels at its long term noise monitoring location.

BNE proposes to report the results of its short term noise monitoring to the Council within two weeks of the conclusion of each of the three months monitored. The long term monitoring results would be reported to the Council on a quarterly basis.

Staff Recommendation: Staff recommends that BNE conduct long-term noise monitoring at two locations, which are identified as locations M1 and M4 in Figure 1 Wind Colebrook North Noise Monitoring and Receptor Locations submitted as part of BNE's responses to the second set of CSC interrogatories.

- l. Provision for an independent third-party monitor to evaluate on-site construction erosion and sedimentation controls and to ensure establishment of appropriate environmental safeguards protective of amphibian and reptile species; and**

According to its interrogatory responses, BNE intended to have Civil 1 Engineering be the third party inspector responsible for monitoring the erosion and sedimentation controls, Dr. Michael Klemens be the inspector responsible for overseeing the Wood Turtle Protection Program, and VHB be the inspector responsible for the installation of the box culverts and the Streambank Restoration program.

The Council has already granted BNE permission to engage these inspectors to fulfill their respective responsibilities.

m. Project Decommissioning Plan.

BNE estimates that the decommissioning costs for Wind Colebrook North would equal \$1,550,000, of which \$1,400,000 would be offset by the salvage value of the project's components, leaving BNE with a net decommissioning price tag of \$150,000. BNE proposes to fund this net amount in equal installments over the first ten years of the project's commercial operation, during which ten annual amounts of \$15,000 would be reserved in some form of surety. Given the volatility of the scrap metals market and its sensitivity to changing economic conditions, however, staff feels that it is unrealistic to project a scrap value for the project twenty years into the future. Staff is also concerned about the difficulty of keeping sureties in place for periods longer than one year, let alone the projected life of this project.

Staff Recommendation: Staff recommends that BNE incorporate the proposed decommissioning specifications, "Proposed Decommissioning Specifications for Wind Colebrook South and Wind Colebrook North," included in the Pre-Filed Testimony of John Stamberg submitted by the Town of Colebrook into its Decommissioning Plan.

Summary of D&M Plan Recommendations

Staff recommends the approval of the D&M Plan with the following conditions:

- BNE shall conduct long-term noise monitoring at two locations, which are identified as locations M1 and M4 in Figure 1 Wind Colebrook North Noise Monitoring and Receptor Locations submitted as part of BNE's responses to the second set of CSC interrogatories;
- Should blasting be required for the project, BNE shall follow the Controlled Blasting specifications (Section 02211) included as Exhibit 2 of the pre-filed testimony of Douglas Roy, dated March 24, 2011;
- BNE shall formalize the conservation plan in accordance with C.G.S. Chapter 822 Easements and Restrictions, within 90 days of the date of the D&M decision letter. A copy shall be provided to the Council and shall be reviewed and approved by staff. Any request for an extension shall be submitted to the Council in writing for approval. The formal conservation restriction shall remove horseback riding, mountain biking, and timber harvesting as permitted uses. BNE shall record the conservation agreement, including a map showing the limits of the conservation area, on the Land Records of the Town of Colebrook during the time it maintains a lease on the project property;
- BNE shall conduct all reconstruction work on Rock Hall Road in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and with the 2004 DEP Stormwater Quality Manual and shall obtain all necessary permits before the commencement of any reconstruction work.. BNE shall set aside \$40,000 in an escrow account reserved for repairing any damage to the reconstructed Rock Hall Road by heavy equipment traveling to and from the site;

- BNE shall follow best management practices for any necessary dewatering activities at the site and that these activities be included in reports of its third party environmental inspector.
- BNE shall allow Town officials access to the site for inspection of Erosion & Sedimentation controls with any resulting recommendations to be considered by the on-site contractor and BNE's Environmental Inspector;
- BNE shall submit to the Council any changes to its Stormwater Management Plan based on DEEP permitting requirements;
- BNE shall submit post-construction monitoring studies of bird and bat mortality, as described in the "Study Plan for Post-construction Fatality Monitoring and Bat Acoustic Monitoring for the Colebrook Wind Resource Area, Litchfield County, Connecticut," dated August 31, 2011, for each of the first three years of commercial operation of the project;
- BNE shall submit the final foundation design plans prior to installation of the turbine foundations;
- BNE shall incorporate the proposed decommissioning specifications, "Proposed Decommissioning Specifications for Wind Colebrook South and Wind Colebrook North," included in the Pre-Filed Testimony of John Stamberg submitted by the Town of Colebrook as part of its Decommissioning Plan.
- BNE shall provide the Council with the location of the proposed fencing and signage related to ice throw and ice drop and an explanation of how these locations were determined.
- BNE shall provide to the Council a copy of any Host Community Agreement it reaches with the Town of Colebrook.