State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
Water Division
29 Hazen Drive, PO Box 95,
Concord, New Hampshire 03302-0095
Attn: 401 Water Quality Certification Program
Phone (603) 271-2457 Fax (603) 271-7894

REQUEST FOR 401 WATER QUALITY CERTIFICATION

Date of Request 08/11/2006

Date Request Received by DES _____

I. Applicant Information

Principal Place of Business of the Applicant Wayne, PA (corporate headquarters of Community Energy, Inc.)	
Mailing Address [Street, PO Box, RR, etc.] Lempster Wind, LLC c/o Community Energy, Inc. 150 Strafford Avenue, Suite 110	
City/Town and Zip Code Wayne, PA 19087	
Telephone No. 203-245-0757	Email Address jeff.keeler@newwindenergy.com
Name and Title of Signatory Official Responsible for the Activity for which Certification is Sought (e.g., President, Administrator) Eric Blank, Manager	

II. Project Information

Name of Project Lempster Mountain Wind Power Project
Name of Town and County that contains the Project Lempster, Sullivan County
Name of Receiving Waterbody and Drainage Basin Scattered wetlands on Lempster Mountain ridgeline; Drainage basins are Richardson Brook, Ashuelot River, Beaver Brook, Cold Brook, May Pond, Babb Brook and Dodge Pond.
Summary of Activity (e.g., construction, operation, or other practice or action) Construction of access roads and tower sites for 12 wind turbine generator units. Activity includes alteration of terrain subject to Site Specific Permit and wetlands crossing subject to NH Standard Dredge and Fill Permit and US Army Corps of Engineers Individual wetlands permit. Stream channel and wetland impacts will occur.

III. Additional Submittal Information

(PLEASE SUBMIT IN ELECTRONIC FORMAT AS MUCH INFORMATION AS POSSIBLE)

- Type of activity (e.g., construction, operation, other action such as water withdrawal) and the start and end dates of the activity.

  The project will involve construction of access roads, wind turbine sites (foundations, lay down areas), underground cable conduit, and a metering point/operations building location. Total alteration of terrain by the Project will entail the creation of approximately 5 linear miles of gravel access roads and conduit for underground electrical collection system, and disturbance of 25 acres total for turbine locations. Construction is proposed to commence in May 2007 and end December 2007, and the project is proposed to be operational before January 1, 2008.

- The characteristics of the activity: Whether the activity is associated with a discharge and/or water withdrawal and whether the discharge and/or withdrawal is proposed or occurring.

  Construction and operation of the wind power project will not include a water withdrawal or discharge.

  Due to the alteration of terrain required for the construction of new roads and wind turbine facilities, the project will have impacts related to stormwater, soil erosion and sediment control. The site is currently a wooded mountainside, with predominantly rocky soil groups as based on NRCS soils maps and on-site investigations. Peak runoff from the site will increase as a result of the project due to the increased impervious area created by gravel access roads and wind turbine sites, and the existing mountainside has increased runoff characteristics due to the steep slopes and rocky soils. However, due to the placement of the project along the highest points of the ridgeline, and the fact that the disturbance is very small when compared to the area of the watershed, there will be negligible increases to runoff as a result of this project.

  Erosion and sediment control will be particularly important during construction activities at the Project site due to the presence of wetlands and stream channels, as delineated by a NH certified wetlands scientist. Stormwater runoff, erosion and sediment control have been addressed in the detailed plans and mitigation measures as submitted in the Standard Dredge & Fill Permit Application and Site Specific Application to NH DES. The Site Specific Application contains a detailed set of project plans, as well as a Stormwater Pollution Prevention Plan that details civil engineering measures that will mitigate soil erosion and sediment control from stormwater related to the Project roads and turbine locations. Civil engineering design of the Project was based on extensive on-site investigations of wetlands and other surface waters, soils, forests, and wildlife, research with environmental agencies, and best practices used in constructing similar roads and facilities.

Proposed impacts to wetlands and stream channels tentatively total 4,375.0 s.f. and include:

Wetland 1: impacts (tentatively 832.8 s.f.) to PSS and PEM wetland communities in the vicinity of the existing roadway will occur due to placement of a culvert to continue water flow under the proposed roadway.
Wetland 10: impacts (tentatively 769.2 s.f.) will occur to this intermittent stream channel due to placement of a culvert to continue water flow under the proposed roadway.
Wetland 12: impacts (tentatively 56.6 s.f.) will occur to this man-made water hole and intermittent stream channel due to replacement of an existing culvert.
Wetland 15: impacts (tentatively 173.9 s.f.) will occur to this intermittent stream channel due to placement of a culvert to continue water flow under the proposed roadway.
Wetland 18: impacts (tentatively 116.3 s.f.) will occur to this intermittent stream channel (man-made roadside drainage ditch) and its fringe PEM wetland due to placement of a culvert to continue water flow under the roadway.
Wetland 19: impacts (tentatively 315.8 s.f.) will occur to this intermittent stream channel (man-made roadside drainage ditch) and its fringe PEM wetland due to placement of a culvert to continue water flow under the roadway.
Wetland 21: impacts (tentatively 544.4 s.f.) will occur to this man-made vernal pool due to the placement of fill for the construction of the proposed roadway. This vernal pool is connected to and drains into a bog.
Wetland 22: impacts (tentatively 484.1 s.f.) will occur to this man-made vernal pool due to the placement of fill for the construction of the proposed roadway.
Wetland 24: impacts (tentatively 1,093.0 s.f.) will occur to this intermittent stream channel and its fringe PEM wetland due to placement of a culvert to continue water flow under the proposed roadway. This stream channel connects an up slope bog to a down slope beaver pond.

- The characteristics of the discharge and/or withdrawal
  - Flow rate (cfs);
  - Potential chemical, physical, biological constituents;
  - Frequency (e.g., daily, hourly,);
  - Duration;
  - Temperature (Celsius); and
  - Latitude and longitude (dd:mm:ss).

Not applicable (no withdrawal or discharge)

- The existing and designated use(s) that are potentially affected by the proposed activities. (Designated Uses are listed in the Consolidated Assessment and Listing Methodology (www.des.state.nh.us/wmb/swqa/default.asp?go=calm)

Designated uses: Based on correspondence with NHDES – Watershed Management Bureau, all surface waters present are classified as Class B water bodies. Therefore their designated uses are considered to be acceptable for fishing, swimming and other recreational purposes, and, after adequate treatment, for use as water supplies.

Other designated uses of the surface waters present may include aquatic life (waters that support a balanced, integrated and adaptive community of aquatic organisms) and wildlife (waters that provide suitable conditions in the water and at the riparian corridor to support wildlife and aquatic life).

Existing uses:

Streams: Because of the intermittent nature and minimal water levels in the small headwater streams that are present, the existing uses are likely to be limited to aquatic life, wildlife, and limited recreational purposes.

Some of these existing uses of these stream channels will not be affected by the proposed activities because the proposed activities (culverting small sections of each stream) were designed based on best management practices used in constructing similar roads.

The placement or replacement of culverts may temporarily affect but will not permanently affect water quality. Downstream sedimentation may occur as a result of stream bed disturbance during construction but this will be limited or eliminated by the use of silt fence and staked straw bales.

Aquatic life and wildlife uses may be impacted in the immediate area of the culvert placement at each stream due to the altered nature of the new environment (within the culvert). A culvert is a modified environment that may limit stream usage by some aquatic and wildlife species; however a culvert may create habitat for other species.

Recreational purposes will not be affected because the property is privately owned and because of their small, intermittent nature, the stream channels do not offer much recreational opportunity.

The proposed activities should have no affect on the opportunity for these streams to be used, after treatment, as water supplies.

Wetlands: Because of the lack of fish habitat and somewhat low water levels, the existing uses of the proposed impacted wetlands are limited to aquatic life (absent fish) and wildlife habitat.

Existing uses of these wetlands in the areas of wetland fill will be permanently affected by the proposed activities but the loss is minimal as previously described.

The small level of wetland impact in each area is unlikely to have an affect on overall water quality within the wetlands, upstream or down stream. Recreational purposes will not be affected because the property is privately owned and because the wetlands do not offer much recreational opportunity. Aquatic life and wildlife usage will only be slightly affected in the wetland areas. Vernal pools are important habitats for some rare wildlife species. Based on conversations with the client and regulatory agencies, digging similar vernal pools next to the two man-made vernal pools that will be filled should be sufficient to mitigate the impacts.

- The provision(s) of surface water quality standards that are applicable to the designated uses affected by the proposed activities (http://www.des.state.nh.us/wmb/env-ws1700.pdf)

Provisions: The placement of culverts over small sections of streams for road construction will have a minimal, if any, affect on the designated uses of the surface waters. Unexpected affects caused by introduced vehicle traffic (such as oil or gas leaks) are possible. During construction, the individual who manages day-to-day operations will be responsible for seeing that any spills are cleaned according to the appropriate local, state or manufacturer regulations. After construction is complete, vehicle traffic will be limited to occasional monitoring and maintenance. Any spills should be dealt with according to appropriate regulations to prevent vehicle fluids from entering the streams. Given the very limited use of the road, impact from vehicle emissions is not likely.

The segments of intermittent streams will be permanently altered by the placement of culverts and the road. Therefore designated uses may be altered in the immediate locations of the proposed culverts. The designated uses that may be affected include aquatic life and wildlife by enclosing the stream channel within a culvert and filling wetland. This will alter and limit the available habitats present, but to such a small extent that no impact is anticipated.

The provisions of surface water quality standards that are applicable to aquatic life and wildlife include:

Aquatic life:

- general water quality criteria (as listed in Env-Ws 1703.03)
- dissolved oxygen (as listed in Env-Ws 1703.07)
- benthic deposits (as listed in Env-Ws 1703.08)
- oil and grease (as listed in Env-Ws 1703.09)
- color (as listed in Env-Ws 1703.10)
- turbidity (as listed in Env-Ws 1703.11)
- slicks, odors and surface-floating solids (as listed in Env-Ws 1703.12)
- temperature (as listed in Env-Ws 1703.13)
- nutrients (as listed in Env-Ws 1703.14)
- gross beta radioactivity (as listed in Env-Ws 1703.15)
- pH (as listed in Env-Ws 1703.18)
- biological and aquatic community integrity (as listed in Env-Ws 1703.19)
- water quality criteria for toxic substances (as listed in Env-Ws 1703.21)
- freshwater aquatic life criteria for metals (as listed in Env-Ws 1703.24)
- freshwater aquatic life criteria for ammonia (as listed in Env-Ws 1703.25)
- freshwater aquatic life criteria for pentachlorophenol (as listed in Env-Ws 1703.32)
- flow standards (as listed in Env-Ws 1705)
- antidegradation (as listed in Env-Ws 1708)

Wildlife:

- water quality criteria for toxic substances (as listed in Env-Ws 1703.21)
- antidegradation (as listed in Env-Ws 1708)

During construction, sedimentation and erosion control measures will be incorporated to prevent water quality impacts. No other discharges are anticipated that would impact/alter water quality standards below Class B.

- Adequate water quality monitoring data to assess all potentially affected surface waters for the designated uses potentially affected by the activity, in accordance with the DES Consolidated Assessment and Listing Methodology (www.des.state.nh.us/wmb/swqa/default.asp?go=calm)

Culverting the stream channels will have a minimal affect on the designated uses of the streams and should have no affect on water quality. No discharges or withdrawals will occur as a result of the project therefore no potential affects could result. Impacts to wetlands are minimal and should not affect water quality. Based on this reasoning it is assumed that no water quality monitoring data will be needed as reference data for potential water quality threshold standards or mitigation.

- A description of any other aspect of the activity that would affect the chemical composition, temperature, flow, or physical aquatic habitat of the surface water.

As previously stated, the physical characteristics of the stream channels in the immediate vicinity of the culvert placements will be permanently altered. The impact areas will be changed from a naturally occurring channel to a culverted, enclosed channel. Stream channel characteristics upstream and down stream will not be altered by the project. Small portions of wetland will be permanently filled. Because impacts are small and similar vernal pools will be excavated nearby impacted vernal pools there should be no affect on water quality or other uses. A wetland mitigation plan will be developed as part of the Section 404 permit process.

- An original or color copy/reproduction of a United States Geological Survey Quadrangle Map that clearly shows the location of the activity and all potential discharge points.

Please see attached Appendix A, Project Map.

- A copy of the final complete federal permit application or federal license application, including the federal permit, license, or project number.

The Project is currently preparing the U.S. Army Corps of Engineers individual wetland permit application, and will provide a copy upon completion.

- A copy of the DES wetlands permit (RSA 482-A:3), if necessary.

  Please see attached Appendix B, NH DES Standard Dredge and Fill Permit Application and related follow up information requests.

- A copy of the DES alteration of terrain permit (RSA 485-A:17), if necessary.

  Please see attached Appendix C, NH DES Site Specific Permit Application.

- The name(s) and address(es) of adjoining riparian or littoral abutters.

  Appendix B, NH DES Standard Dredge and Fill Permit Application, contains a list of abutters and map of abutting land parcels (Exhibit B and Exhibit C to wetlands application).

- A plan showing the proposed activities to scale including:

  - The location(s) and boundaries of the activities;

    Locations of the access roads, wind turbines, and cables are indicated in detail in Appendix A (Project Map) and in Appendices B and C, wetlands and site specific permit applications, which include detailed engineering plans.

  - The location(s), dimension(s), and type(s) of any existing and/or proposed structures; and

    Locations of proposed structures are shown on the maps in Appendices B, D, and E. The type of structure is a wind turbine generator, which is comprised of the following major components:
    - a concrete foundation, with 22' diameter and depth of 30' or bedrock
    - Rotor measuring 285' in diameter, made up of three individual blades of 139' in length each.
    - A "nacelle" that attaches to the rotor and contains the gearbox, low-and high-speed shafts, generator, and other controls.
    - A tower made of tubular structural steel in two sections, with a height of 256'

    The other proposed structure includes a project operation & maintenance building for housing personnel and computer equipment and storage of maintenance equipment and parts, sited on a concrete pad and approximately 2,500 square feet in dimension. This will be located at the project metering point, at the bottom of Bean Mountain Road as identified on the maps.

- The location(s), name(s), identification number(s), and extent of all potentially affected surface water bodies, including wetlands.

  Surface waters, including wetlands, are identified in Appendices D and E in wetlands and site specific permit applications.

Signature – MUST BE SIGNED AND DATED BY APPLICANT

To the best of my knowledge, the data and information described above, which I have submitted to the New Hampshire Department of Environmental Services, is true and correct. I understand that an approval of the requested 401 Certification based upon incorrect data may be subject to revocation of the 401 Certification. I have complied with all local regulations or ordinances relative to the proposed activity and have obtained or will obtain, prior to the commencement of any work, all other approvals that may be required.

Signed: Eric Blanke

Date: 8.9.06

List of Appendices

A. Project Map (USGS Survey Quadrangle Map that clearly shows the location of the activity and all potential discharge points.

B. Standard Dredge and Fill Permit Application, submitted to NH DES Wetlands Division on March 24, 2006, and responses to follow-up information requests in NH DES letter of June 19, 2006.

C. Site Specific Application, submitted to NH DES Water Division on April 14, 2006.

Note for Site Evaluation Committee:

The Appendices listed on p. 9 of the Request for 401 Water Quality Certification have already been provided as other appendices to the Project's SEC Application, so they have not been included or duplicated as part of the copy of this request as provided herein.