



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

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February 13, 2013

Lee D. Hoffman, Esq.
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103-3702

RE: **PETITION NO. 983** - BNE Energy, Inc. 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 Flagg Hill Road, Colebrook, Connecticut. **Development and Management Plan.**

Dear Attorney Hoffman:

At a public meeting of the Connecticut Siting Council (Council) held on February 7, 2013, the Council considered and approved the modification to the Development and Management (D&M) Plan submitted for this project on November 2, 2012, with the following conditions:

- BNE shall submit a copy of the site plans and Stormwater Management Plan with Stormwater Pollution Prevention Plan stamped by a Professional Engineer duly licensed in the State of Connecticut within 60 days of the date of this letter;
- BNE shall submit a revision to the Wetland and Wildlife Restoration Plan submitted under condition 2(h) of the Decision and Order dated June 2, 2011 that is consistent with the approved modifications to the D&M Plan within 60 days of the date of this letter to be reviewed and approved by Council staff; and
- BNE shall remove erosion and sedimentation controls prior to the spring migration of reptiles and amphibians as deemed appropriate by Dr. Michael Klemens.

This approval applies only to the D&M Plan modification submitted on November 2, 2012. Any changes to the D&M Plan require advance Council notification and approval. Any request for an extension of time to comply with the conditions of this decision letter may be submitted to the Council in writing.

Please be advised that deviations from this plan are enforceable under the provisions of Connecticut General Statutes § 16-50u. Enclosed is a copy of the staff report on this D&M Plan modification, dated February 7, 2013.

Thank you for your attention and cooperation.

Very truly yours,



Robert Stein
Chairman

RS/MAB/MP

Enclosure: Staff Report, dated February 7, 2013

c: Parties and Intervenors, dated May 4, 2012



Petition No. 983
Revised D&M Plan
Staff Report
February 7, 2013

On June 2, 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 Flagg Hill Road, Colebrook, Connecticut. The project entails the construction and installation of three GE 1.6 MW wind turbines on a 79.4 acre parcel located on Flagg Hill Road and owned by BNE. As required in the Council's Decision and Order, BNE submitted a Development and Management Plan for this project on September 16, 2011. On October 20, 2011, the Council granted BNE approval for site clearing and to retain an environmental inspector (Dr. Michael Klemens). Dr. Klemens has been submitting erosion and sedimentation monitoring reports on a bi-weekly basis since the commencement of clearing on December 5, 2011. On October 28, 2011, the Council received a modification to the D&M Plan regarding the relocation of the temporary construction access road to avoid use of the driveway and utility easement in favor of the subject property over property owned by Robin Dziedzic Hirtle (Hirtle) located at 29A Flagg Hill Road. The complete D&M Plan, including the temporary construction access road, was approved on November 17, 2011.

BNE submitted a revised Development and Management Plan (Revised D&M Plan) on November 2, 2012. BNE purchased the adjacent 5-acre parcel and existing residence known as 29A Flagg Hill Road to the southeast of the subject property owned by Hirtle and thereby seeks to modify the access road that was approved on November 17, 2011.

The Revised D&M Plan access road modification would utilize 1,200 feet of existing gravel driveway that serves the residence at 29A Flagg Hill Road in lieu of construction of 1,500 feet of new access road, as previously approved by the Council. By utilizing the existing driveway, construction impacts associated with the clearing, extensive grading, and ditching of a new road along a steep hillside would be avoided. The new access road alignment would not use the existing driveway to 17 Flagg Hill Road as previously approved, but instead would extend from the existing driveway serving 29A Flagg Hill Road at a more moderate grade to the previously approved road alignment.

The access road would be further modified to pass along the gravel driveway previously constructed for the wind testing tower, then through the western portion of the existing meadow near the center of the property rather than along the eastern boundary of the existing meadow. This new alignment through the western portion of the meadow would eliminate the construction of a hairpin turn and extensive grading along a steep slope west of the meadow.

In the D&M Plan approved on November 17, 2011, BNE proposed to use the existing residence located at 17 Flagg Hill Road as offices and an educational center. In the Revised D&M Plan, BNE proposes to use the existing residence located at 29A Flagg Hill Road formerly owned by Hirtle as an educational center and maintenance facility. A new use for the 17 Flagg Hill Road residence has not been determined.

The 350 foot by 60 foot crane pad, tower laydown area, crane assembly area, staging area and material processing area located at the southern turbine site (Turbine #1 site) would be reduced to a 200 foot by 60 foot crane pad and tower laydown area. The crane assembly area, staging area and material processing area would be re-located from the Turbine #1 site to the western portion of the existing meadow. Approximately 0.94 acres of the existing cleared meadow area would be disturbed by this relocated crane assembly area, staging area and material processing area during construction and it would serve both the Turbine #1 site and the northeastern turbine site (Turbine #2 site). However, 2.64 acres of existing cleared meadow would be left undisturbed during construction. BNE was unable to avoid the meadow area completely; otherwise, the access road location would result in additional clearing within the 750-foot vernal pool clearing envelope (to the west).

The currently approved project has a total construction clearing area of 13.32 acres. This revised D&M plan has a total construction clearing area of slightly less – 12.91 acres. However, since the access road paths are different and clearing has already been performed based on the earlier D&M approval, the two areas do not completely overlap. Thus, there would be a net increase in cleared area of about 3.16 acres since not all of the previously cleared area would be necessary under the revised D&M plan.

BNE, in consultation with Dr. Klemens, plans to restore those areas that are cleared but no longer needed by letting them convert to meadows. Native grass seed has been planted in the previously cleared areas. This would increase open meadow habitat for wildlife. If approved, the cleared areas that are converted to meadows shall be included in the Wetland and Wildlife Restoration Plan required to be filed by BNE under Condition 2(h) of the Decision and Order dated June 2, 2011.

The Turbine #1 site would be re-located approximately 135 feet to the east onto more gentle sloping terrain of the knoll farther away from the wetland area/beaver pond on the site (265 feet). This would result in 6,100 square feet of less tree clearing within 100 feet of the beaver pond. While the southern turbine would be about 135 feet closer to the home on 29A Flagg Hill Road, this home is now owned by BNE. The setback distance of the southern turbine from the existing residence at 29A Flagg Hill Road would decrease from 1005 feet to 870 feet and the setback distance of the southern turbine from the property line at 29A Flagg Hill Road would decrease from 740 feet to 605 feet. This change in location would also cause the ground elevation to change from 1,449 feet above mean sea level (amsl) to 1,465 feet amsl. This is an increase of 16 feet.

The Turbine #2 site would be re-located approximately 167 feet to the southwest further into the interior of the host property onto more gentle sloping terrain, which would significantly reduce the amount of fill by 12,550 cubic yards. The northeastern turbine would be located roughly 100 feet farther south of The Northwest Connecticut Sportsman's Association property boundary to the north. This change in location would also cause the ground elevation to change from 1,457 feet amsl to 1,479 feet amsl. This is an increase of 22 feet.

The turbines have a maximum blade tip height of 141.25 meters (m) or 463 feet. An increase of 16 to 22 feet due to increased ground elevation is not expected to be significant. It is less than the difference in blade tip height between a 41.25m rotor radius and a 50m rotor radius which is 8.75m or about 29 feet. Furthermore, Turbine #2 would be moved farther (southwest) into the subject property, thus making it a more distant view from most vantage points. Turbine #1 would be moved eastward (or approximately

parallel to the north and south boundaries) and closer to the Hirtle property that would contain an educational center where slightly closer views of the Turbine #1 would be helpful for visitors.

Access road realignment impacts are summarized in the following table.

Item	Previous Plan	Current Plan	Difference
Cut (cy)	26,850	14,950	-44%
Fill (cy)	34,300	23,250	-32%
Area of Construction (ac)	13.23	12.91	-2.4%
Road Length (ft)	5,660	4,092	-27%
Maximum proposed grade	13.95%	12.5%	-10.4%
Area of 1.5:1 slopes w/riprap (sf)	32,950	4,400	-87%
Disturbance on slopes over 25%	2.54	0.82	-68%

The revised plans comply with the 2002 Calhoun and Klemens Report (Report) regarding clearing within proximity to vernal pools. The Report recommends no clearing within 100 feet of a vernal pool and no more than 25 percent clearing within 100 feet to 750 feet from a vernal pool. As proposed in this revised D&M Plan, there would be no clearing within 100 feet of either (eastern or western) vernal pool. Furthermore, the areas of disturbance between 100 feet to 750 feet of the eastern and western vernal pools would be 20.35 percent and 6.14 percent, respectively.

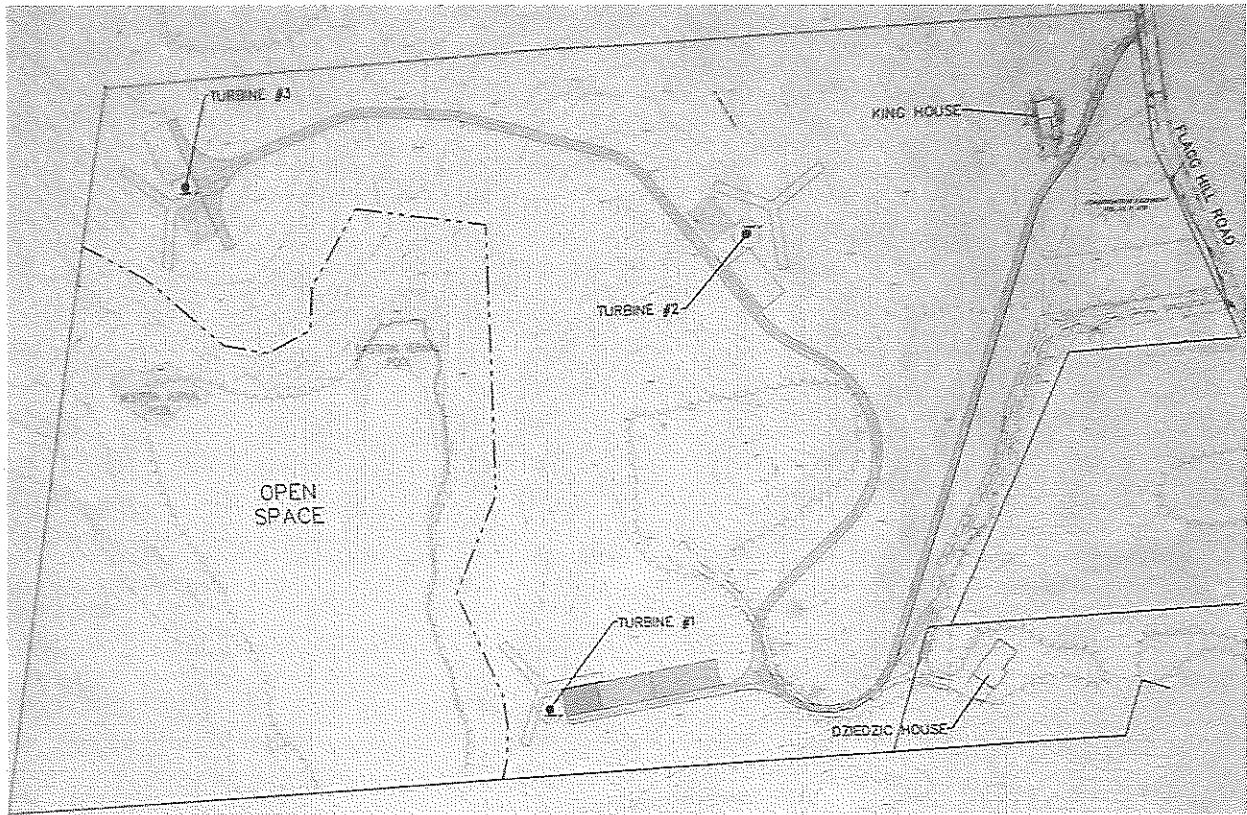
BNE has consulted with Dr. Michael Klemens regarding the revised D&M Plan. Dr. Klemens notes that, "...[T]he acquisition of the adjacent house (29-A Flagg Hill Road) has presented an opportunity to improve the overall conservation management values of the site without impacting vernal pool resources." These improvements noted by Dr. Klemens are listed below.

- Reduction in cuts and fills by using a large portion of existing driveway.
- Increased open meadow habitat. As areas that were cleared in preparation of the old road alignment are no longer required, they will be converted to additional meadow habitat, which should improve the attractiveness of the area for snakes, including the smooth green snake, a Connecticut State-listed Species of Special Concern.
- Opportunity for an educational facility much closer to the wind turbines than the previous location. This results in a better educational opportunity to be at the turbine sites as opposed to the bottom of the hill.

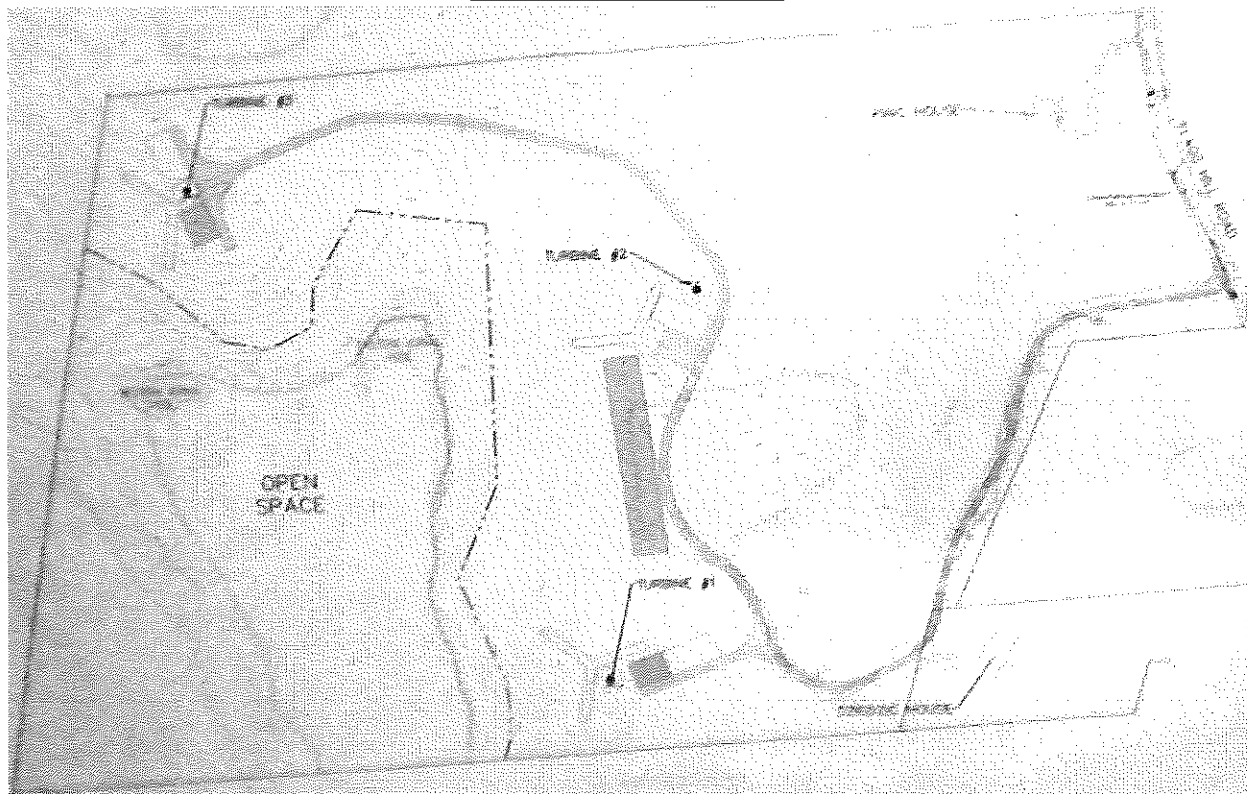
The proposed changes would not result in an adverse impact to the amphibian populations of vernal pool obligate species (wood frogs and spotted salamanders) breeding in the Eastern and Western Vernal Pools. The reduction in cuts and fills would be an environmental benefit, creating less opportunity for erosion and less disturbance to the earth and rock strata, particularly to the south and east of the existing meadow area. The creation of meadows is important in such densely forested habitat for a broad array of species that would benefit by such openings.

Copies of this Revised D&M Plan were served to all parties and intervenors on the service list at the time of filing with the Council. No comments on the Revised D&M Plan have been received.

Approved D&M Site Plan



Proposed D&M Site Plan



Approved Location of Turbine #1



Proposed Location of Turbine #1



Approved Location of Turbine #2



Proposed Location of Turbine #2



Existing Meadow Area



E&S Controls on approved access to the east of the meadow



E&S Controls on Eastern Boundary as viewed from access

