

STATE OF VERMONT  
PUBLIC SERVICE BOARD

Docket No. 7560

Petition of BNE Energy Inc. for a certificate of )  
public good, pursuant to 30 V.S.A. § 248(j), )  
authorizing the operation and installation of a )  
temporary wind measurement tower and )  
associated meteorological equipment, to be )  
located northeast of Bigelow Basin at an )  
elevation of 2,450 feet in the Lowell Mountain )  
range near the Town of Eden, Vermont )

Order entered: 12/10/2009

**I. INTRODUCTION**

This case involves a petition filed on July 13, 2009, by BNE Energy, Inc. ("BNE") requesting a certificate of public good under 30 V.S.A. § 248(j) authorizing the installation and operation of one temporary wind measurement tower in Eden, Vermont (the "Project").

On August 7, 2009, the Clerk of the Public Service Board ("Board") issued a letter requesting further information regarding the petition.

On September 3, 2009, BNE filed the required information.

Notice of the filing was sent on September 28, 2009, to all entities specified in 30 V.S.A. § 248(a)(4)(c) and all other interested parties. The notice stated that any party wishing to submit comments as to whether the petition raises a significant issue with respect to the substantive criteria of 30 V.S.A. § 248 needed to file comments with the Board on or before November 2, 2009. A similar notice of the filing was published in *The Transcript* on October 5 and October 12, 2009.

On December 2, 2009, the Department of Public Service filed a letter stating that the proposed project is consistent with the Vermont Electric Twenty Year Plan, pursuant to 30 V.S.A. § 202(f).

A number of public comments were filed, which are discussed below.

No other comments on the petition were filed.

The Board has determined that the proposed construction will be of limited size and scope and that the petition has effectively addressed the issues raised with respect to the substantive criteria of 30 V.S.A. § 248. Consequently, we find that the procedures authorized by Section 248(j) are sufficient to satisfy the public interest, and no hearings are required.

## **II. COMMENTS OF THE PUBLIC**

In addition to the meteorological ("MET") tower proposed by BNE, Green Mountain Power Corporation ("GMP") has proposed three wind measurement towers along the Lowell Mountain range, approximately one mile north of BNE's proposed MET tower. GMP's proposal is not being reviewed under the expedited process allowed under Section 248(j) because the Board determined that GMP's proposed project is not limited in size and scope, as required by Section 248(j).<sup>1</sup> The Board has received several comments regarding wind measurement towers located in the Lowell range, and it is unclear from some of the comments whether the comments were referring to the towers proposed by GMP, the tower proposed by BNE, or both. Accordingly, where there was uncertainty, we have attempted to be inclusive in determining which comments pertain to BNE's proposed project. More than ten public comments were received regarding the proposed project.

One commenter raised several questions regarding the Project, including the necessity for the Project, the visual and environmental impacts, and whether the Project will produce a public benefit. The commenter contends that the Project will not be in the public good.

Another commenter recommended that the Board deny the Project to protect the environment and allow the tourism industry to continue to flourish.

Some commenters requested that a public hearing be held regarding the MET towers.

Several commenters supported the installation of the MET towers.

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1. GMP's petition is being reviewed in Docket 7558. Unlike GMP's petition, the BNE MET tower does not involve the installation of lights on the towers and does not involve significant earthwork to install the base of the tower.

### Discussion

The majority of the comments received regarding the proposed MET towers along the Lowell range involved the impacts of a wind generation facility. The subject of this Order is one 197-foot wind measurement tower that is proposed to be in place for a maximum of five years. Any wind generation facility that arises from the collection of data by the MET tower will be reviewed in a separate proceeding, and members of the public will have the opportunity to comment in that proceeding, via a public hearing and written comments, as well as formally participate in the proceeding if a sufficient showing can be made to intervene in the case. Additionally, it is worth noting that the data from the wind measurement tower approved in today's Order may demonstrate that the wind resource at the site is insufficient, and a wind generation facility is not feasible in that location.

The petition effectively addresses the issues raised with respect to the criteria of Section 248, and there is a sufficient showing for the Board to find that the installation of the proposed MET tower promotes the public good of the State. Given the minimal impacts associated with the Project, particularly given the temporary nature of the MET tower, the Board concludes that a public hearing is not necessary.

### III. FINDINGS

1. BNE proposes to install a temporary wind meteorological tower and associated meteorological equipment at an elevation of 2,450 feet within the Lowell Mountain range, in Eden, Vermont, located northeast of Bigelow Basin. Access to the site will be from nearby Albany Road, located in Eden. Hebert pf. at 1; exh. B.

2. BNE was incorporated in 2006 for the purpose of developing, owning, and operating wind generation facilities. BNE is proposing the Project as an essential step in evaluating and planning a potential wind generation facility at the 354-acre Bigelow Basin Forest property. Petition at 1.

3. The MET tower will include a guyed, galvanized steel tubular tower, 8 to 10 inches in diameter and up to 197 feet in height. Anemometers and direction sensors will be mounted at several levels along the tower. Electric power to the data recorder will be provided by batteries

recharged by a photovoltaic panel located approximately ten feet above ground level. Hebert pf. at 1.

4. The MET tower will be transported to the site by a four-wheel-drive, all-terrain vehicle ("ATV"), or snowmobile over existing roads and trails, with the exception of a small extension of the trail to the site. Limited clearing will be required to allow for ATV access to the site, with felled trees left on site. Hebert pf. at 1, 6.

5. One to two acres will be cleared to allow for assembly of the MET tower. The MET tower will be assembled in ten-foot sections laid out along the ground. The meteorological sensors, data-recording equipment, and guy wires will be attached to the assembled tower sections. Guy wires will be secured with anchors in the ground at the four corners. The base will consist of a three- to four-foot-square steel plate that sits on the ground surface. The tower will be winched into a vertical position and the guy wires will be tensioned. Hebert pf. at 1-2, 6; exh. E.

6. Data from the MET tower will be collected for up to five years, although a shorter period may be adequate if there are existing long-term reference data that show a good correlation to the data collected. Hebert pf. at 2.

### **Orderly Development of the Region**

[30 V.S.A. § 248(b)(1)]

7. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. This finding is supported by findings 8 through 10, below.

8. The Project is consistent with the land conservation measures contained in the Lamoille County Regional Plan and the Eden Town Plan. Hebert pf. supp. at 1.

9. The Lamoille County Regional Plan and the Eden Town Plan state that future land uses in the Forestry District (lands over 1500 feet in elevation) should continue to be devoted to forestry and wildlife habitat. The Project will have minimal impacts on wildlife and the ability to

use the land for forestry. Additionally, the tower and all related components will be completely removed from the site after five years, thereby further minimizing impacts from the Project.

Hebert pf. supp. at 2.

10. BNE submitted advance notice of the Project as required pursuant to Section 248(f). No comments were received by any of the entities receiving notice. Letter of September 2, 2009, from Paul Corey to Susan M. Hudson, Clerk of the Board.

#### **Need for Present and Future Demand for Service**

[30 V.S.A. § 248(b)(2)]

11. The Project does not require electric service or produce any electricity. The collection of data produced by the Project may lead to the development of a future wind generation facility.

Hebert pf. at 3.

#### **System Stability and Reliability**

[30 V.S.A. § 248(b)(3)]

12. The Project is not connected to the electric system and therefore would not adversely affect system stability and reliability. Hebert pf. at 3.

#### **Economic Benefit to the State**

[30 V.S.A. § 248(b)(4)]

13. The Project will result in an economic benefit to the state and its residents. There will be a small economic benefit due to the creation of temporary jobs during the installation and monitoring process. Hebert pf. at 4.

**Aesthetics, Historic Sites, Air and Water Purity,  
the Natural Environment and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

14. The Project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and public health and safety. This finding is supported by findings 15 through 34 below, which are the criteria specified in 10 V.S.A. §§ 1424(a)(d) and 6086(a)(1)-(8)(a) and (9)(k).

**Outstanding Resource Waters**

[10 V.S.A. § 1424(a)(d)]

15. The Project is not located on or near any outstanding resource waters. Hebert pf. at 4.

**Water and Air Pollution**

[10 V.S.A. § 6086(a)(1)]

16. The Project will not result in undue water or air pollution. This finding is supported by findings 17 through 26, below.

17. The Project will not produce emissions or noise. Hebert pf. at 4.

**Headwaters**

[10 V.S.A. § 6086(a)(1)(A)]

18. Given the limited soil disturbance associated with installation of guy-wire anchors and access to the site, surface water bodies and drainage features will not be impacted. Hebert pf. at 4.

**Waste Disposal**

[10 V.S.A. § 6086(a)(1)(B)]

19. The Project will meet applicable health and Environmental Conservation Department regulations to the disposal of wastes, and does not involve the disposal of wastes or injection of any material into surface or ground water. The limited amount of construction debris created by the Project will be hauled off-site for disposal in accordance with applicable laws. Hebert pf. at 5.

**Water Conservation**

[10 V.S.A. § 6086(a)(1)(C)]

20. The Project will not require the use of water. Hebert pf. at 5.

**Floodways**

[10 V.S.A. §§ 6086(a)(1)(D)]

21. The Project is not located in a floodway. Hebert pf. at 5.

**Streams**

[10 V.S.A. §§ 6086(a)(1)(E)]

22. The Project site is not located near any streams and access to the site will not involve any new stream crossings. Accordingly, no streams will be adversely affected, nor will the Project endanger the health and safety or welfare of the public or adjoining landowners. Hebert pf. at 5; exh. B.

**Shorelines**

[10 V.S.A. §§ 6086(a)(1)(F)]

23. The Project is not located on a shoreline. Hebert pf. at 5; exh. B.

**Wetlands**

[10 V.S.A. § 6086(a)(1)(G)]

24. The Project will not impact any wetlands and will comply with the rules of the Natural Resources Board relating to significant wetlands. Hebert pf. at 5; exh. B.

**Sufficiency of Water and Burden on Existing Water Supply**

[10 V.S.A. §§ 6086(a)(2)&(3)]

25. The Project will not require the use of water. Hebert pf. at 5.

**Soil Erosion**

[10 V.S.A. § 6086(a)(4)]

26. The Project will not result in unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result. Direct soil disturbance related to the Project will be limited and consists of disturbing a small amount of soil to install the guy-wire anchors. The base of the tower sits above ground, the access to the site will be via existing access roads and trails, with the exception of a small extension of the trail to the site. Only one to two acres will be cleared to allow for installation of the tower, but stumps and brushy undercover will remain in place, while brush that is cut will be spread out into low, thin piles. Hebert pf. at 6.

**Transportation Systems**

[10 V.S.A. § 6086(a)(5)]

27. The Project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. Hebert pf. at 6.

**Educational and Municipal Services**

[10 V.S.A. § 6086(a)(6) and (7)]

28. The Project will have no impact on educational or municipal services. Hebert pf. at 6.

**Aesthetics, Historic Sites  
and Rare and Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

29. The Project will not have an undue adverse impact on the scenic or natural beauty of the area, aesthetics, historic sites, or rare and irreplaceable natural areas. This finding is supported by findings 30 through 32, below.

30. The visual impacts of the Project will be minimal and not adverse. Although a portion of the tower will be visible above the tree canopy, it will be difficult to see the tower at distances greater than one mile. The weathered galvanized tubing of the tower, and the gray guy wires,

will blend well with either blue or cloudy sky backgrounds. The visibility of the tower will depend on how far the viewer is from the tower, atmospheric conditions, and the presence of intervening terrain, vegetation, and buildings. Most of the public views of the tower are more than one mile away. Hebert pf. at 7.

31. The Project will not impact historic sites or archeological resources. Hebert pf. at 7.

32. The Project will not have an undue adverse effect on rare or irreplaceable natural areas. Hebert pf. at 7.

### **Necessary Wildlife Habitat and Endangered Species**

[10 V.S.A. § 6086(a)(8)(A)]

33. The Project will not destroy or significantly imperil necessary wildlife habitat or any endangered species. Wildlife impacts are expected to be minimal. Although birds have been known to hit towers and guy wires at night, studies indicate that such incidents usually occur with towers that have lights and are much taller than the tower proposed by BNE. It is anticipated that there will not be significant avian impacts from the proposed MET tower. Hebert pf. at 7-8

### **Development Affecting Public Investments**

[10 V.S.A. § 6086(a)(9)(K)]

34. The Project will not unnecessarily or unreasonably endanger any public or quasi-public investment in any government or public facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of the public's use or enjoyment of or access to such facilities, services or lands. Hebert pf. at 8.

### **Least-Cost Integrated Resource Plan**

[30 V.S.A. § 248(b)(6)]

35. BNE does not distribute or transmit electricity for use by the public. Therefore, it is not obligated to prepare and submit for approval an integrated resource plan. *See*, Docket No. 7082, Order of 4/26/06 at 54.

**Compliance with Electric Energy Plan**

[30 V.S.A. § 248(b)(7)]

36. The Project is consistent with the *Vermont Twenty-Year Electric Plan*. Electric policy described in the Plan includes "maximizing service in a manner that is consistent with efforts to protect the quality of the environment over time . . . . Meeting Vermont's energy needs in a sustainable way . . . means making a long-term commitment to maintain the appropriate contributions from renewable resources and minimizing our dependence on imported fossil fuel." The Plan describes wind power as technologically viable and ecologically acceptable. Hebert pf. at 8.

37. The Department filed a determination, in a letter dated December 2, 2009, that the proposed project is consistent with the *Vermont Twenty-Year Electric Plan*, in accordance with 30 V.S.A § 202(f).

**Outstanding Resource Waters**

[30 V.S.A. § 248(b)(8)]

38. The Project is not located on or near any outstanding resource waters. Hebert pf. at 8.

**Existing or Planned Transmission Facilities**

[30 V.S.A. § 248(b)(10)]

39. The Project will not be served by any transmission facilities, existing or planned. Hebert pf. at 8.

**III. CONCLUSION**

Based upon all of the above evidence, we conclude that the proposed construction will be of limited size and scope; the petition does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. § 248; the public interest is satisfied by the procedures authorized by 30 V.S.A. § 248(j); and the proposed project will promote the general good of the state.

**IV. ORDER**

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont ("Board") that the proposed Project, in accordance with the evidence and plans presented in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. Section 248, and a certificate of public good shall be issued in the matter, with the following conditions:

1. Construction, operation and maintenance of the project shall be in accordance with the plans and evidence submitted in this proceeding.
2. BNE Energy, Inc., shall remove the wind measurement tower and associated equipment within five years of the date of this Order.
3. The Certificate of Public Good accompanying this Order shall not be transferred without prior approval of the Board.

Dated at Montpelier, Vermont this 10th day of December, 2009.

s/ James Volz	)	PUBLIC SERVICE
	)	
	)	
s/ David C. Coen	)	BOARD
	)	
	)	OF VERMONT
s/ John D. Burke	)	

OFFICE OF THE CLERK

FILED: December 10, 2009

ATTEST: s/ Susan M. Hudson  
Clerk of the Board

*NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)*

*Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.*