

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7346

Petition of Grandpa's Knob Windpark, LLC for)
a certificate of public good, pursuant to 30)
V.S.A. § 248(j), authorizing the installation and)
operation of temporary wind measurement)
towers and associated equipment in Hubbardton)
and West Rutland, Vermont)

Order entered: 12/12/2007

I. INTRODUCTION

This case involves a petition filed on July 13, 2007, by Grandpa's Knob Windpark, LLC ("GKW"), requesting a certificate of public good ("CPG") pursuant to 30 V.S.A. § 248(j) authorizing the installation and operation of two temporary wind-measurement towers and associated equipment located respectively at sites in Hubbardton and West Rutland, Vermont ("Project").¹

On July 13, 2007, GKW filed the petition, prefiled testimony, and proposed findings with the Public Service Board ("Board"), the Vermont Department of Public Service ("Department") and the Vermont Agency of Natural Resources ("ANR"), as specified in 30 V.S.A. § 248(a)(4)(C), pursuant to the requirements of 30 V.S.A. § 248(j)(2).

On July 26, 2007, the GKW filed a letter with the Board requesting that the petition be held in abeyance until GKW filed additional information regarding the proposed Project's compliance with § 248(f). On September 12, 2007, GKW filed supplemental information regarding the proposed Project's compliance with § 248(f).

Notice of the filing in this Docket was sent on October 4, 2007, to all parties specified in 30 V.S.A. § 248(a)(4)(C) and all other interested persons. The notice stated that any party

1. The proposed project initially included three towers, but was subsequently amended to remove the tower planned for a site in Pittsford, Vermont, from the Project.

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 must file their comments with the Board on or before November 2, 2007. Notice of the filing, with a request for comments on or before November 2, 2007, was also published in *The Rutland Herald* newspaper on October 5 and 12, 2007.

By letter dated October 31, 2007, GKW notified the Board that it was no longer seeking approval for the meteorological tower proposed for a site in Pittsford, Vermont, as part of the proposed Project.

The Department filed a Determination letter under 30 V.S.A. § 202(f) on November 14, 2007. The letter stated that the proposed Project is consistent with the Vermont Twenty-Year Electric Plan for the State.

Comments regarding the proposed Project were filed with the Board by several landowners in the Project area. The Board received comments from: Todd and Christy Forest; Paula Liguori; Bob and Karen Webster; Robert Welsh; Carson and Margaret Davidson; Carol and Melvin Aldrich; Jocelyn and Emerson Frost; Ann and James Rademacher; and Joseph Hamilton.

The majority of the comments raise general concerns regarding wind farms and development of natural areas in general.² The instant petition requests approval for wind measurement towers. Any subsequent request for approval to construct a wind generation facility will be the subject of a separate proceeding and will afford interested persons the opportunity to comment on the proposal. Some of the commenters expressed concerns that the installation of the meteorological towers may require additional road building to access the proposed sites, thereby increasing access to these remote areas. However, the petition states that access to the proposed sites will utilize only existing roads and all-terrain-vehicle trails and will require no additional road construction or improvements. Therefore, the comments do not raise any significant issues under the criteria of 30 V.S.A. § 248 specific to the temporary wind measurement towers proposed here.

2. Ms. Liguori raised some specific concerns regarding the tower proposed to be located in Pittsford, Vermont. However, that tower, as explained above, is no longer part of the proposed Project and, therefore, any issues with respect to that tower are now moot.

On October 19, 2006, the Department filed a letter with the Board stating that the petition raises no significant issues with respect to the criteria of 30 V.S.A. § 248. The Department's letter also recommends that GWK's proposed findings regarding a future wind-generation facility providing power at market-based rates not be accepted by the Board. The Department also notes that references to the meteorological tower that was removed from the Project should be removed from the draft proposal for decision submitted by GWK. In addition, the Department argues that the majority of the letters submitted by members of the public express concerns with the "construction of a wind-generation facility that is not the subject of the petition now before the Board."

On November 7, 2007, ANR filed a letter with the Board stating that the petition raises no significant issues with respect to the criteria of 30 V.S.A. § 248. ANR requests, in the letter, that the Board modify the proposed finding regarding headwaters. ANR also requests that the Board hold the record in this docket open for additional comments to accommodate the agency's site visit to the area planned for November 15, 2007.³

No other comments have been filed.

The Board has determined that the proposed construction will be of limited size and scope and that the petition and prefiled testimony have 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. FINDINGS

1. GWK proposes to erect temporary wind-measurement towers at two locations along the Grandpa's Knob ridgeline in the towns of Hubbardton and West Rutland. Staskus pf. at 2; exh. A.
2. Access to the tower locations will utilize existing roads and all-terrain-vehicle ("ATV") trails to reduce the amount of tree clearing necessary for the proposed Project. Staskus pf. at 3; exhs. A and B.

3. On November 15, 2007, ANR notified the Board that it had no additional comments based on its site visit. Therefore, we will consider the comment period in this docket closed.

3. Tree cutting of up to three-quarters of an acre for each site will be required. Limited clearing sufficient for ATV access between existing trails and the site itself will also be necessary. Staskus pf. at 3; exh. D.

4. The wind-measurement towers include a guyed, galvanized steel, 8 to 10-inch diameter tubular tower, up to 197 feet (60 meters) in height, with anemometers and direction sensors mounted at several levels. Wind speed, wind direction, air temperature, and other meteorological parameters are recorded on a battery-powered data recorder. Electric power to the tower is provided by batteries that are recharged with a photovoltaic panel mounted on the tower at approximately 10 feet above ground level. Staskus pf. at 2.

5. The equipment will be transported to the site using a four-wheel-drive vehicle, ATV or snowmobile over existing roads and trails to reduce the amount of clearing required. The temporary wind-measurement tower is assembled in ten-foot sections laid out along the ground. The meteorological sensors, data recording equipment, and guy wires are attached to the assembled tower sections. The guy wires are secured by anchors to the ground. No concrete or other permanent above ground alterations are necessary for the installation of the measurement tower. The tower is then winched into a vertical position and the guy wires are tensioned. *Id.* at 3.

6. Wind data and meteorological data will be continuously measured with summary statistics recorded over 10-minute or longer periods and stored electronically in the data recorder at the base of the wind-measurement tower. Every several days, the data recorder will "call out," using its internal cell phone, to an Internet Service Provider so that the stored data can be sent to GKW via an e-mail attachment. *Id.*

7. Measurement will continue for a period of up to five years to establish the long-term annual mean wind speed estimates. A shorter period may be adequate if a good correlation exists between a long-term reference station nearby and the measurement tower. *Id.*

8. Upon termination of the wind-evaluation period, the tower hardware and recording equipment will be lowered to the ground, disassembled and removed from the site. If guy anchors cannot be removed, they will be sawed off below grade, leaving the site and access trail

with no man-made equipment visible. Vegetation will continue to grow, and over time the site will be restored to close to its original condition. *Id.* at 5.

Orderly Development of the Region

[30 V.S.A. § 248(b)(1)]

9. The proposed 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 10 and 11, below.

10. The proposed Project is located entirely on privately-owned property, will not provide electricity and involves no transmission or distribution lines. Staskus pf. at 7.

11. By letter of July 23, 2007, GKW notified the Rutland Regional Planning Commission and the municipal legislative bodies of the towns of Pittsford, Hubbardton, and West Rutland of the proposed Project pursuant to 30 V.S.A. § 248(f). No comments regarding the proposed Project have been filed by the regional and municipal legislative bodies.⁴ See letter dated September 12, 2007, from GKW.

Need For Present and Future Demand for Service

[30 V.S.A. § 248(b)(2)]

12. The proposed Project will not require or contribute to electrical service. It could lead in the future to a petition for a wind farm that would be available to provide renewably-produced electricity to users in Vermont. Staskus pf. at 7.

System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

13. The proposed Project will not be connected to the electric system, and therefore will not

4. On November 1, 2007, the Town of Pittsford filed copies of letters from Pittsford residents regarding the proposed Project. However, the town itself did not comment on the Project.

adversely affect system stability and reliability. Staskus pf. at 7.

Economic Benefit to the State

[30 V.S.A. § 248(b)(4)]

14. If the site is determined to possess the wind resources required for a wind generation facility, that information may provide an economic benefit by assisting the State in determining in the future whether to approve any proposed development of wind-powered generation at the site. Staskus pf. at 8.

15. The installation of the wind measurement tower and equipment will have a small economic benefit to the state, due to the temporary job creation resulting from the permitting, installation and monitoring of the wind measurement tower and equipment and the evaluation of the data generated. *Id.*

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

[30 V.S.A. § 248(b)(5)]

16. The proposed Project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment and the public health and safety. This finding is supported by Findings 17-47, below, which are based on the criteria specified in 10 V.S.A. §§1424a(d) and 6086(a)(1) through (8), 8(A) and (9)(K).

Outstanding Resource Waters

[10 V.S.A. § 1424a(d)]

17. The proposed Project is not located on or near any Outstanding Resource Waters. Staskus pf. at 8.

Water and Air Pollution

[10 V.S.A. § 6086(a)(1)]

18. The proposed Project will not result in undue water or air pollution. This finding is supported by Findings 19-21, below.

19. The proposed Project does not involve any emissions and will not produce any noise. Staskus pf. at 9.

20. The proposed Project will involve only limited soil disturbance in order to anchor the tower's guy wires. *Id.* at 3.

21. The proposed Project will use existing roads and trails for access. *Id.*

Headwaters

[10 V.S.A. § 6086(a)(1)(A)]

22. The proposed Project is subject to the headwaters criterion because its elevation exceeds 1,500 feet. However, any impacts to water quality will be minimal. Access to the proposed Project will be infrequent and utilize existing roads and trail. Tower construction will also involve minimal soil disturbance to anchor guy wires. Staskus pf. at 3, 9; supp. pf. at 1-2.

Waste Disposal

[10 V.S.A. § 6086(a)(1)(B)]

23. The proposed Project as designed meets any applicable health and environmental conservation regulations regarding the disposal of wastes, and does not involve the injection of waste materials or any harmful or toxic substances into ground water or wells. All construction debris produced during construction of the proposed Project will be disposed in accordance with applicable laws. Staskus pf. at 9.

Water Conservation

[10 V.S.A. § 6086(a)(1)(C)]

24. The proposed Project will not require the use of water. Staskus pf. at 10.

Floodways

[10 V.S.A. § 6086(a)(1)(D)]

25. The proposed Project will not be located in a floodway. Staskus pf. at 10.

Streams

[10 V.S.A. § 6086(a)(1)(E)]

26. The proposed Project is not located on or adjacent to any streams. Staskus pf. at 10.

Shorelines

[10 V.S.A. § 6086(a)(1)(F)]

27. The proposed Project is not located near any shorelines. Staskus pf. at 10.

Wetlands

[10 V.S.A. § 6086(a)(1)(G)]

28. The proposed Project is in compliance with the rules of the Water Resources Board relating to significant wetlands since there are no class I or II wetlands located near the proposed Project sites or access trails. Staskus pf. at 10; exh G; *see also* letter from ANR dated November 7, 2007.

Sufficiency of Water and Burden on

Existing Water Supply

[10 V.S.A. §§ 6086(a)(2)(3)]

29. The proposed Project will not require the use of water and, therefore, will not place a burden on any existing water supply. Staskus pf. at 10.

Soil Erosion

[10 V.S.A. § 6086(a)(4)]

30. The proposed Project will not result in unreasonable soil erosion or reduce the ability of the land to hold water. This finding is supported by Findings 31 and 32, below.

31. The proposed Project will involve only limited soil disturbance in order to anchor the

tower's guy wires. Staskus pf. at 11.

32. The proposed Project will use existing roads and trails for access. *Id.*

Traffic

[10 V.S.A. § 6086(a)(5)]

33. The proposed Project will not cause unreasonable congestion or unsafe conditions with respect to transportation systems. This finding is supported by Finding 34, below.

34. During the one-to-two day construction period, a utility van will bring the meteorological equipment, the tower erection equipment and an ATV to the access road. Staskus pf. at 12.

Educational Services

[10 V.S.A. § 6086(a)(6)]

35. The proposed Project will have no impact on the ability of the involved municipality to provide educational services. Staskus pf. at 12.

Municipal Services

[10 V.S.A. § 6086(a)(7)]

36. The proposed Project will not unreasonably burden the ability of any involved municipalities to provide municipal services. Staskus pf. at 12.

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

[10 V.S.A. § 6086(a)(8)]

37. The proposed Project will not have an undue adverse effect on the scenic or natural beauty, aesthetics, historic sites or rare and irreplaceable natural areas. This finding is supported by Findings 38-43, below.

38. Although the portion of the proposed Project above the tree canopy will be visible, the 8-10 inch diameter tower will be difficult to distinguish against the sky from more than one mile

away. Staskus pf. at 13.

39. The weathered galvanized tubing and gray guy wire will blend well with either blue or cloudy sky backgrounds. *Id.*

40. The proposed Project will be less visible than existing 350 and 113-foot tall communications towers located in the vicinity. *Id.* at 13-14; exh F-1.

41. The proposed Project is temporary and will be removed after five years. Staskus pf. at 3-5.

42. The proposed Project will not impact any known historic sites or natural areas. *Id.* at 15.

43. The Hubbardton Battlefield Visitor Center is located approximately 2 miles northwest of the nearest tower, therefore, the proposed Project will not adversely impact this site. *Id.* at 15.

**Necessary Wildlife Habitat and
Endangered Species**

[10 V.S.A. § 6086(a)(8)(A)]

44. The proposed Project will not have an undue adverse impact on any necessary wildlife habitat or known endangered species sites. This finding is supported by Findings 45 and 46, below.

45. Since the measurement tower is relatively low, and will not be lighted, no significant impacts to birds are expected from this installation. Staskus pf. at 15.

46. An environmental review of the proposed Project area found that rare, threatened or endangered species are unlikely to be affected by the proposed Project. *Id.* at 16; exh. G; *see also* letter from ANR dated November 7, 2007, at 2.

Development Affecting Public Investments

[10 V.S.A. § 6086(a)(9)(K)]

47. The proposed Project will not unnecessarily or unreasonably endanger the public or quasi-public investments in any governmental public utility facilities, services, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of or access to such facilities, services, or lands. Staskus pf. at 16.

Consistency with Resource Selection

Least-Cost Integrated Resource Plan

[30 V.S.A. § 248(b)(6)]

48. GKW 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 7082, Order of April 26, 2006, at 54; Staskus pf. at 16.

Compliance With Electric Energy Plan

[30 V.S.A. § 248(b)(7)]

49. The proposed Project is consistent with the 20-Year Electric Plan. *See* Letter of determination from the Department filed with the Board on November 14, 2007; Staskus pf. at 16.

Outstanding Resource Waters

[30 V.S.A. § 248(b)(8)]

50. The proposed Project is not located on or near any "Outstanding Water Resource" as designated by the State of Vermont Water Resources Board. Staskus pf. at 17.

Existing Transmission Facilities

[30 V.S.A. § 248(b)(10)]

51. The proposed Project will not be served by any transmission facilities, existing or planned. Staskus pf. at 17.

IV. CONCLUSION

Based upon all of the above evidence, the construction is 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 in 30 V.S.A. § 248(j); and the proposed Project will promote the general good of the state.

V. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that the installation and operation of temporary wind measurement towers and associated equipment in Hubbardton and West Rutland, Vermont, by Grandpa's Knob Windpark, LLC ("GKW"), in accordance with the evidence and plans submitted in this proceeding, will promote the general good of the State of Vermont in accordance with 30 V.S.A. § 248, and a certificate of public good to that effect shall be issued in this matter with the following conditions:

(1) The wind measurement towers and associated equipment shall be removed from the respective sites within five years of the date of the Certificate of Public Good issued in this docket.

(2) Prior to filing a petition for approval of a wind generation facility at these sites, GKW shall consult with the Department of Public Service ("Department") and the Agency of Natural Resources ("ANR"). Any such petition shall include a statement by GKW that it has worked in good faith with the Department and ANR to address the need for information prior to review of any proposed project under 30 V.S.A. § 248.

Dated at Montpelier, Vermont, this 12th day December, 2007.

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

OFFICE OF THE CLERK

FILED: December 12, 2007

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.