

STATE OF VERMONT
PUBLIC SERVICE BOARD

Joint Petition of Green Mountain Power)
Corporation, Vermont Electric Cooperative, Inc.)
and Vermont Electric Power Company, Inc. for a) Docket No. _____
Certificate of Public Good pursuant to 30 V.S.A. §)
248, to construct up to a 63 MW wind electric)
generation facility and associated facilities on)
Lowell Mountain in Lowell, Vermont and the)
installation or upgrade of approximately 16.9 miles)
of transmission line and associated substations in)
Lowell, Westfield and Jay, Vermont)

**JOINT PETITION OF GREEN MOUNTAIN POWER CORPORATION, VERMONT
ELECTRIC COOPERATIVE, VERMONT ELECTRIC POWER CO., INC. AND
VERMONT TRANSCO LLC FOR A CERTIFICATE OF PUBLIC GOOD PURSUANT
TO 30 V.S.A §248**

By this Petition, Green Mountain Power Corporation (“GMP”), Vermont Electric Cooperative, Inc. (“VEC”), Vermont Electric Power Co., Inc., and Vermont Transco LLC (together, “VELCO,” and with GMP and VEC the “Petitioners”) represent as follows:

I. DESCRIPTION OF THE PETITIONERS

1. Each Petitioner is a company as defined by 30 V.S.A. § 201, and are subject to the jurisdiction of the Vermont Public Service Board (the “Board”) pursuant to 30 V.S.A. § 203.
2. GMP’s offices are located at 163 Acorn Lane, Colchester, Vermont.
3. VEC’s offices are located at 42 Wescom Road, Johnson, Vermont.
4. VELCO’s offices are located at 366 Pinnacle Ridge Road, Rutland Vermont.
5. GMP and VEC provide electric power in the state of Vermont, and VELCO provides transmission service in the state of Vermont.

II. DESCRIPTION OF THE PROJECT

6. Petitioners seek Board authorization and a Certificate of Public Good (“CPG”) pursuant to 30 V.S.A. § 248 to construct a wind-powered electric generating facility and associated transmission improvements (the “Project”). The Project consists of 20-21 wind turbines each with a capacity of 2.5-3.0 megawatts (“MW”) and a maximum capacity of approximately 63 MW on Lowell Mountain in the town of Lowell, Vermont.
7. Depending on the turbine selected, the towers will be between 410 feet (125 meters) and 443 feet (135 meters) tall from ground to blade tip at its highest point. The rotors will be between 295 feet (90 meters) and 328 feet (100 meters) in diameter. Some of the wind turbines will have night-time flashing red lights, mounted on the nacelle, as required by the Federal Aviation Administration (“FAA”).
8. The infrastructure supporting the wind farm portion of the Project includes a 2.5 mile access road from Route 100 to the turbines located along the ridgeline, a ridgeline crane path, turbine pads to facilitate construction of the turbines, a step-up substation and maintenance building halfway up the access road, and an electrical collection system (part of which will be underground) that will connect the turbines to a the local transmission system.
9. There will also be upgrades to the local transmission system, including improvements to two existing VEC Substations in Lowell and Jay, Vermont, and improvements to existing transmission lines between the Lowell # 5 Substation and the VELCO 115 kV system in Jay, Vermont.
10. A new VELCO Jay Tap Substation will be needed to interconnect the existing 46 kV system to the VELCO 115 kV system in Jay, Vermont. Because the proposed substation is not yet fully designed, it is not a part of this Petition. VELCO expects to file a Section 248 request relating to the proposed substation early next year, and construction on the Project will not begin until VELCO obtains all necessary regulatory approvals for the VELCO Jay Tap Substation.
11. Although not required for the Project, VEC is presently seeking Section 248 approval for improvements to the existing VEC Jay Tap Switching Station. *In Re Petition of Vermont Electric Cooperative, Inc., for a Certificate of Public Good*, Docket No. 7604.

12. GMP will decommission the wind farm after its useful life, in a manner generally consistent with the requirements established by the Board in recent wind generation Section 248 proceedings, except that GMP does not propose to provide security for the cost of decommissioning, due to its utility status.
13. GMP has negotiated a Letter of Intent with VEC, which includes a term sheet identifying the material terms for a power purchase agreement providing for the purchase of up to 8 MW of the Project output by VEC, at a price equal to GMP's cost plus a premium equal to two times VEC's pro rata share of the Project development costs. The Letter of Intent also includes a separate term sheet identifying the material terms of a joint ownership agreement, whereby GMP and VEC agree to construct, maintain, and operate the transmission system upgrade and to share the costs and capacity of the upgraded system on a 58.46%/41.54% basis.
14. GMP and VEC engaged in a significant public outreach process over the past year to inform the residents of Lowell and surrounding communities about the proposed Project. On March 2, 2010, the residents of Lowell voted in favor of the Project by a vote of 342-114.
15. GMP provided 45 day advance notice to the persons entitled to notice under 30 V.S.A. § 248(f). The changes to the Project from the description contained in the 45 day notice include (1) a reduction in the proposed number of turbines from 20-24 to 20-21, (2) the addition of temporary construction access by means of Meek Road, and (3) adjustments to the dimensions of certain components, including the access road length (from 2.25 to 2.5 miles), crane path width (from 36 to 34 feet), Project Substation height (from 40 to 45 feet), and pole heights for the segments between the underground collector and the KCW Substation (from 43 feet to 43-52 feet) and along Route 100 to the Lowell #5 substation (from 43 feet to 35-52 feet).
16. GMP has served copies of this filing on the parties specified in 30 V.S.A. § 248(a)(4)(C). GMP has also made good faith efforts to notify adjoining landowners of this Petition, as required by Board Rule 5.402(B)(3), based on the grand lists of the affected towns.
17. Pursuant to Board Rule 5.403(B)(1), Petitioners have also provided notice of the filing to towns and municipal and regional planning commissions within a 10-mile radius of the wind generation station.

18. Petitioners request that the Board issue an Order in this proceeding by the Spring of 2011, in order to complete Project construction by the December 31, 2012 deadline for availability of federal Production Tax Credits.

III. COMPLIANCE WITH SECTION 248 CRITERIA

19. As demonstrated below, the Project meets all Section 248 criteria.

Orderly Development of the Region – 30 V.S.A. § 248(b)(1)

20. The Project will not unduly interfere with the orderly development of the region. The Project is consistent with the Northeast Vermont Development Association (“NVDA”) and Lowell plans, and the Lowell residents voted in favor of the Project.

Need for the Project – 30 V.S.A. § 248(b)(2)

21. Approximately three quarters of GMP’s and VEC’s current power supply sources will expire between 2012 and 2015, leaving both companies with a need for substantial new resources. This gap cannot be addressed completely by efficiency, load management or similar measures. The Project would provide a needed resource to meet GMP’s and VEC’s needs.

System Stability and Reliability –30 V.S.A. § 248(b)(3)

22. The Project will not have an undue adverse impact on system stability and reliability. Based on a draft Feasibility Study, the Project can be accommodated by the existing transmission system, as proposed to be upgraded. A System Impact Study is expected to be completed and filed in this proceeding later this year.

Economic Benefit to the State – 30 V.S.A. § 248(b)(4)

23. The Project will provide an economic benefit to the state and its residents. It is a new renewable, long-term, stably-priced resource located within Vermont that is expected to compare favorably to alternative new renewable generation over the life of the Project. GMP’s analysis reflects a 25-year life for the wind farm, although it is likely that many

components will last longer. Other Project benefits to the state and its residents include additional jobs and tax revenues.

Act 250 Criteria – 30 V.S.A. § 248(b)(5) and (8)

24. The Project will not have an undue adverse effect under these criteria, for the reasons set forth below.

Public Health and Safety – 30 V.S.A. §248(b)(5)

25. The Project will not create an unreasonable risk of danger to the public health and safety. The design, construction and operation of the Project will comply with all applicable safety requirements. The wind farm is located in a remote area, vehicular access will be controlled and appropriate signage will be posted adjacent to the wind farm.

Air Pollution – 30 V.S.A. § 248(b)(5); 10 V.S.A. §6086(a)(1)

26. The Project will not result in undue air pollution. No air emissions will occur during the operational phase of the Project and the bedrock present at the Project site does not contain asbestos or otherwise pose special health or environmental hazards in connection with Project-related blasting and construction disturbance.

Water Pollution; Outstanding Resource Waters; Headwaters – 10 V.S.A. § 1424a(d); 10 V.S.A. §6086(a)(1); 10 V.S.A. § 6086(a)(1)(A); 30 V.S.A § 248(b)(8)

27. There are no outstanding resource waters near the Project. Although the Project is located in a headwaters area, there will be no adverse impacts because the Project will conform to applicable water quality protection regulations, and GMP will comply with a Spill Prevention, Control and Countermeasures Plan (“SPCC”).

Waste Disposal – 10 V.S.A. § 6086(a)(1)(B)

28. The Project will not involve the injection of waste materials into the ground. It will meet any applicable health and environmental conservation department regulations, and

construction debris will be removed from the Project site and disposed of in accordance with all applicable rules and regulations. GMP will design operational phase storm water treatment practices (“STPs”) that will be consistent with Department of Environmental Conservation (“DEC”) requirements. GMP is proposing alternative STPs in several areas that will reduce the environmental impact of the Project.

Water Conservation – 10 V.S.A. § 6086(a)(1)(C)

29. The Project will require only minimal water for construction (for dust control) and no water is needed for the operation of the wind turbines. Water conserving fixtures will be used at the maintenance building.

Floodways – 10 V.S.A. § 6086(a)(1)(D)

30. There are FEMA-mapped floodways within the Project’s transmission component, but there will be minimal alterations of waterways. No permanent fills of floodways or flood plain areas will be required for the Project. The Project will not restrict or divert the flow of flood waters, endanger the public during flooding or significantly increase the peak discharges.

Streams – 10 V.S.A. § 6086(a)(1)(E)

31. The Project components that are adjacent to the stream banks will be designed to maintain the natural condition of the stream, buffer zones have been provided, and the access road and required stream crossings have been designed to minimize stream impacts.

Shorelines – 10 V.S.A. § 6086(a)(1)(F)

32. There are no shorelines near the wind farm and where the upgraded transmission crosses areas that may be considered shorelines, they will be stabilized to prevent erosion, and the banks and vegetation will be retained in their natural condition.

Wetlands – 10 V.S.A. § 6086(a)(1)(G)

33. All delineated wetlands within the wind farm area are Class III wetlands. Where Class II wetlands and buffers exist along the transmission right of way, GMP will select the practicable route that minimizes wetland and buffer impact and will employ construction practices to minimize impacts.

Sufficiency of Water and Burden on Existing Water Supply – 10 V.S.A. § 6086(a)(2), (3)

34. The Project will involve minimal use of water during the construction and operational phases. The Project’s well will be sufficient for its reasonably foreseeable needs and thus the Project will not cause an unreasonable burden on an existing water supply.

Soil Erosion – 10 V.S.A. § 6086(a)(4)

35. GMP will prepare an Erosion Prevention and Sediment Control Plan (“EPSC Plan”) consistent with DEC requirements to ensure that the Project will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water during construction.

Transportation Systems, Education and Government Services
10 V.S.A. § 6086(a)(5), (6), (7)

36. The Project will not cause unreasonable congestion or unsafe conditions with respect to the use of highways, waterways, railways, airports, or airways. All public roads will be able to accommodate the expected volume of traffic without creating unsafe operating conditions or excessive congestion. The Project will not cause an unreasonable burden on the ability of the town of Lowell to provide educational services. The Project will result in the hiring of up to three local employees, which will not burden the local schools. The Project will not cause an unreasonable burden on the ability of the local governments to provide municipal or governmental services. GMP has entered into an agreement with the Town of Lowell providing for minimum annual payments and training for emergency personnel.

Scenic Or Natural Beauty; Aesthetics; Historic Sites – 10 V.S.A. § 6086(a)(8)

37. Although the Project will cause an adverse effect on aesthetics, the impact will not be undue under the *Quechee* analysis. The Project does not conflict with a clearly written community standard intended to preserve the aesthetics of the Project area. Reasonable mitigation steps have been taken, including use of colors for the wind turbines intended to blend in with the surroundings, and access road construction techniques intended to reduce visual impacts. The Project is not shocking or offensive to the average viewer. In particular, Vermonters are becoming more supportive of wind farms as an aspect of the working landscape
38. Based on an analysis of the proposed wind turbines and modeling techniques, the Project is not expected to produce sound at levels that exceed the Board's standards identified in the Deerfield and Sheffield cases. The construction activities and operational characteristics of the proposed wind farm will not create sound levels that will intrude on people's lives.
39. Based on the *Middlebury College* analysis, the Project will not have an undue adverse effect on above-ground historic sites. Although the Project will be visible from several historic sites, reasonable mitigating steps have been taken, the Project will not interfere with the public's ability to interpret or appreciate the historic qualities of the sites, the cumulative effects of the Project do not create an unacceptable impact, and the Project does not violate a clear written community standard intended to preserve the historic qualities of the Project area.
40. The Project will not have an undue adverse impact on archeological resources. No historic period archeological sites were identified during site inspection or background research, although areas along the transmission route and at the lay down area require further study, which will be undertaken this Summer. As long as the appropriate archaeological study(s) are completed in accordance with the Vermont guidelines for conducting archaeology in Vermont that have been approved by the Vermont Division for Historic Preservation, the proposed Project will have no undue adverse effect.

Rare And Irreplaceable Natural Areas – 10 V.S.A. § 6086(a)(8)

41. The Project will not have an undue adverse effect on rare and irreplaceable natural areas (“RINAs”) under 10 V.S.A § 6086(a)(8) because there are no RINAs in the Project investigation areas. Moreover, there are no significant natural communities in the Project investigation area, except along the transmission route on the Westfield/Lowell town line, and undue adverse impacts on these communities can be avoided.

Wildlife, Including Necessary Wildlife Habitat and Endangered Species – 10 V.S.A. § 6086(a)(8)(A)

42. The Project will not have an undue adverse affect on endangered plant species. There is only one state protected plant in the Project area (Male Fern), which will not be affected by the Project. The Project will not have an undue adverse effect on large mammals, and any impact on necessary bear feeding areas can be adequately mitigated by conserving adjacent bear feeding and habitat areas. Finally, based on a number of field studies and a thorough review of data relating to other regional wind projects, the Project will not have an undue adverse effect on birds or bats.

Development Affecting Public Investments – 10 V.S.A. § 6086(a)(9)(K)

43. The Project will not unnecessarily or unreasonably endanger the public or the quasi-public investments in the Project’s vicinity, nor will it interfere with the function or enjoyment of these investments. There is no direct impact of the Project on public investments, and the aesthetic impact meets the standards contained in the *Quechee* test.

Consistency with Principles of Resource Selection Contained in GMP’s IRP – 30 V.S.A. § 248(b)(6)

44. The construction of the Project is consistent with least-cost principles contained in GMP’s and VEC’s approved Integrated Resource plans (“IRPs”). The IRPs identify new renewable generation as one of several types of electric supply resources that should have priority in the power planning and procurement activities.

Compliance with DPS Electric Plan – 30 V.S.A. § 248(b)(7)

45. The Project is in compliance with the electric energy plan approved by the Department under section 30 V.S.A. § 202, because it increases resource diversity, promotes clean and stable power sources and lowers the cost for electric service for customers.

**Can be Served Economically by Existing or
Planned Transmission Facilities – 30 V.S.A. § 248(b)(10)**

46. The upgraded transmission facilities, together with the proposed VELCO Jay Tap Substation, will be adequate to serve the wind farm.

IV. SUMMARY OF TESTIMONY

47. In support of this Petition, the Petitioners submit prefiled testimony and exhibits of the following witnesses:

a. General Overview; Project Description

Mary Powell. Ms. Powell provides an overview of GMP's decision to pursue the Project.

Robert Dostis. Mr. Dostis describes the economic benefits of the Project associated with the Lowell Agreement and of the proposed Good Neighbor Fund. He also describes GMP's outreach efforts and the Lowell vote in favor of the Project on March 2, 2010.

Charles Pughe. Mr. Pughe provides a Project overview, describes the proposed GMP\VEC agreements, and summarizes how the Project complies with all Section 248 criteria.

David Estey. Mr. Estey describes the transmission line upgrades, the new KCW Substation and the improvements to the existing substations and addresses whether the Project will have an undue adverse effect on system reliability and stability. He also sponsors a feasibility study completed for GMP.

Ian Jewkes. Mr. Jewkes describes the civil works associated with the Project access road and crane path and various Project stormwater treatment practices.

John Zimmerman. Mr. Zimmerman identifies the expected wind resource that will be available for electric generation. He also describes the extent of potential ice throw and shadow flicker and whether they will adversely affect public safety or aesthetics.

b. Need; Economics

Doug Smith. Mr. Smith describes the market value of Project output, need for and economic benefit of the Project consistency with GMP's IRP, and compliance with the Department of Public Service ("Department") Electric Energy Plan. He also describes the proposed GMP-VEC Power Purchase Agreement.

Anthony Kvedar. Mr. Kvedar describes the annual and levelized cost per kWh of Project output and describes the impact on GMP's retail rates.

Thomas Kavet. Mr. Kavet addresses the Project's economic benefits from the perspective of impact on the local and regional economy, including increased employment and contribution to state and local taxes, and the lack of any negative impact on local property values.

Craig Kieny. Mr. Kieny supports the proposed GMP-VEC Power Purchase Agreement and explains how it is consistent with VEC's IRP.

Jeff Wright. Mr. Wright describes the proposed GMP-VEC Joint Ownership Agreement and the proposed transmission upgrades, and addresses consistency with VEC's IRP.

c. Aesthetics; Historic Sites

David Raphael. Mr. Raphael addresses the aesthetic impacts of the Project, and addresses whether the Project will interfere with orderly development of the region or result in an undue adverse effect on public investment.

Liz Pritchett. Ms. Pritchett addresses the potential impact of the Project on the inventory of above-ground historic sites.

Ken Kaliski. Mr. Kaliski addresses whether the Project will meet the sound-related standards established by the Board in past wind project cases.

Charles Knight. Mr. Knight explains potential Project effects on archeological resources.

d. Natural Resources

Adam Gravel. Mr. Gravel sponsors the various bird and bat studies that have been undertaken over the past several years, and provides analysis of potential Project bird and bat impacts.

Jeffrey Nelson. Mr. Nelson provides an inventory of streams, wetlands and plant communities in the Project area, as well as testimony on whether the Project will have an undue adverse effect on streams, wetlands, water supplies, rare or threatened species (plants), or rare or irreplaceable natural areas.

Jeffrey Wallin. Mr. Wallin explains potential Project impacts on the necessary wildlife habitats for white-tailed deer and black bear, and on moose winter areas.

V. RULE 5.200 NOTICE

48. By filing the Letter of Intent attached as Exh. Pet.-CP-5, GMP and VEC hereby give notice under Board Rule 5.200 of their intent to enter into a power purchase agreement on substantially the terms set forth therein. GMP and VEC will supplement this notice when a final power purchase agreement is executed.

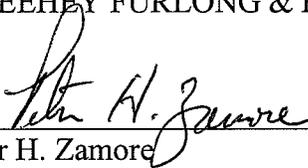
WHEREFORE, the Petitioners respectfully request the Board to:

- a. Hold a prehearing conference, establish a schedule for this case and issue an order approving the Project under 30 V.S.A. § 248 in a time frame consistent with GMP's need to commence operation by the end of 2012.
- b. Find that the proposed Project will promote the general good of the State of Vermont and authorize the Petitioners to undertake the actions as described herein and in the testimony and exhibits, and issue a Certificate of Public Good to that effect
- c. Take such other measures as may be required for the expeditious review and approval of this Petition.

DATED at Burlington, Vermont this 21st day of May, 2010.

GREEN MOUNTAIN POWER CORPORATION

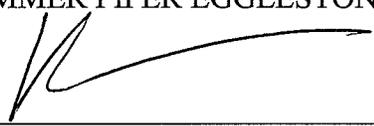
By: SHEEHY FURLONG & BEHM, P.C.

By:  _____

Peter H. Zamore
30 Main Street, P.O. Box 66
Burlington, Vermont 05402
(802) 864-9891
pzamore@sheehyvt.com

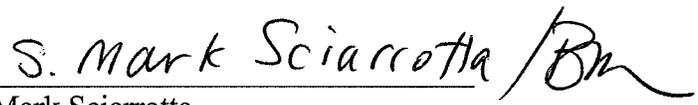
VERMONT ELECTRIC COOPERATIVE

By: PRIMMER PIPER EGGLESTON & CRAMER

By:  _____

Victoria J. Brown
Primmer Piper Eggleston & Cramer PC
150 S. Champlain St., PO Box 1489
Burlington VT 05402-1489
(802) 864-0880
vbrown@ppeclaw.com

VERMONT ELECTRIC POWER COMPANY, INC.
VERMONT TRANSCO LLC

By:  _____

S. Mark Sciarrotta
Senior Counsel
Vermont Electric Power Company, Inc.
366 Pinnacle Ridge Road
Rutland, Vermont 05701
(802) 770-6339
msciarrotta@velco.com