

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Petition of Green Mountain Power Corporation)
for a certificate of public good, pursuant to 30) Docket No. ____
V.S.A. § 248(j), authorizing the installation)
and operation of three temporary wind)
meteorological stations on Lowell Mountain in)
Lowell, Vermont)

**DIRECT TESTIMONY OF DANIEL PRASCH
ON BEHALF OF GREEN MOUNTAIN POWER CORPORATION**

August 7, 2009

Summary of Testimony

Mr. Prasch's testimony addresses the potential impacts under the environmental criteria identified in 30 V.S.A. § 248(b)(5) of the proposed Project to install and operate three wind measurement stations in Lowell, Vermont. He concludes that the Project will not result in any undue adverse impact under any of the criteria he addresses.

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Petition of Green Mountain Power Corporation)
for a certificate of public good, pursuant to 30) Docket No. ____
V.S.A. § 248(j), authorizing the installation)
and operation of three temporary wind)
meteorological stations on Lowell Mountain in)
Lowell, Vermont)

**DIRECT TESTIMONY OF DANIEL PRASCH
ON BEHALF OF GREEN MOUNTAIN POWER CORPORATION**

1 **1. Q. Please state your name and business address.**

2 A. My name is Daniel J. Prasch, and my business address is VHB Pioneer
3 (“VHBP”), 7056 US Route 7, North Ferrisburgh, Vermont.

4

5 **2. Q. By whom are you employed and in what position?**

6 A. I am employed by Vanasse Hangen Brustlin, Inc., d/b/a VHBP as a Senior
7 Wetland Scientist. My full resumé is provided as Exh. GMP-DP-1

8

9 **3. Q. Please describe your background and qualifications.**

10 A. I received my B.S. degree in Biological Aspects of Conservation from the
11 University of Wisconsin-Madison. I also hold a graduate certificate in Geographic
12 Information Systems from the University of Wisconsin-Madison. Prior to my
13 employment with VHBP, I worked as a wetland ecologist for a consulting firm in

1 southeastern Wisconsin. As a wetland scientist I am involved in wetland delineations,
2 functions and values assessments, wildlife, and permitting for projects, such as the
3 proposed installation and operation of three temporary wind meteorological stations
4 (towers, associated meteorological instrumentation, access roads) (the "Project").

5

6 **4. Q. Have you ever presented testimony to the Public Service Board ("Board")**
7 **before?**

8 **A.** Yes, I have presented testimony to the Board previously in several different
9 proceedings, including petitions for Certificate of Public Good ("CPG") on behalf of the
10 Vermont Electric Power Company, Inc. ("VELCO") and Green Mountain Power
11 Corporation ("GMP") in Docket 7314, (East Avenue Loop) and for the Gorge Area
12 Reinforcement (GAR) Project (Docket No. 7469). Additionally, I have provided
13 testimony to the Board on behalf of Vermont Public Power Supply Authority ("VPPSA")
14 for Project 10 Multi-fuel Peaking Generation Facilities in Swanton, Vermont (Docket No.
15 7376). My most recent involvement with the Board relates to a petition for a CPG on
16 behalf of New England Power d/b/a National Grid for the G-33 Refurbishment Project
17 (Docket No. 7500).

18

19 **5. Q.** Do you hold any professional licenses or certifications?

20 **A.** Yes. I am a Certified Wetland Scientist under the authority of RSA 310-A by the
21 Joint Board of Licensure and Certification for the State of New Hampshire. The State of
22 Vermont does not implement a program for certification of wetland scientists.

23

1 **6. Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to address whether the Project complies with the
3 environmental criteria under Section 248. In her testimony, Ms. Staskus describes the
4 various components of the Project, including locations of proposed tower sites and access
5 routes, the manner of transporting equipment to the tower sites, and the associated
6 impacts relating to the criteria I address. In addition to a review of the proposed project
7 components, my analysis is also based on a number of visits to the Project location,
8 including a review of the proposed access locations and tower sites, which was conducted
9 on July 14, 2009.

10

11 **7. Q. Please address the environmental criteria under Section 248.**

12 A. What follows is a listing of each of the § 248(b) criteria I address with a
13 description in each numbered paragraph of how the Project complies with the criteria
14 specified.

15

16 **Aesthetics, Historical Sites, Air and Water Purity,**
17 **the Natural Environment, and Public Health and Safety**

18 [30 V.S.A. §248(b)(5)]

19

20 (1) The Project will not have an undue adverse impact on air and water purity,
21 the natural environment and the public health and safety, with due consideration having
22 been given to the criteria specified in 10 V.S.A. § 1424a(d) and § 6086(a)(1) through (8)
23 and (9)(K) discussed below.

24

25 **Outstanding Resource Waters**

26 [10 V.S.A. §1424a(d)]

27

1 installation material debris, which will be limited, will be hauled off-site for disposal in
 2 accordance with applicable requirements. In addition, as described below under the soil
 3 erosion criterion, an Erosion Prevention and Sediment Control (“EPSC”) Plan will be
 4 developed as part of the Stormwater Permit to manage disturbed soil during Project
 5 construction. Any woody debris from the Project site will be used for soil stabilization or
 6 removed by the contractor. All areas of disturbed earth will be managed in accordance
 7 with the Project’s EPSC Plan. In addition, the Project will not generate waste on an
 8 ongoing basis. Accordingly, the Project will meet all applicable DOH and DEC
 9 regulations for the disposal of wastes, and will not involve the injection of waste
 10 materials or any harmful or toxic substances into ground water or wells. Therefore, there
 11 will be no undue adverse impacts due to waste disposal as a result of the construction of
 12 the Project.

13 **Water Conservation**

14 [10 V.S.A. §6086(a)(1)(C)]

15 (6) As described in Act 250, the criterion of water conservation (10 V.S.A. §6086
 16 (a)(1)(C)) as incorporated into Section 248 review will be met if the project design
 17 incorporates water conservation principles. In this case the Project will not utilize water
 18 during or after installation and, accordingly, the criteria specified in 10 V.S.A. §
 19 6086(a)(1)(C) relating to water conservation are inapplicable.

20 **Floodways**

21 [10 V.S.A. §6086(a)(1)(D)]

22 (7) The term “floodway” is defined in the criterion of water conservation (10
 23 V.S.A. §6086 (a)(1)(D)) as incorporated into Section 248 review, to mean “the channel of
 24 a watercourse which is expected to flood on an average of at least once every 100 years

1 and the adjacent land areas which are required to carry and discharge the flood of the
2 watercourse...” The term “floodway fringe” is defined in Section 6001(17) as “an area
3 which is outside a floodway and is flooded with an average frequency of once or more in
4 each 100 years...” VHBP analyzed the available Federal Emergency Management
5 Agency (FEMA) Flood Insurance Rate Map and determined that the Project is not
6 located on any lands that meet the floodway criteria under Section 6086(a)(1)(D). As
7 such, there will be no floodway impacts as a result of the proposed Project.

8 Streams

9 [10 V.S.A. §6086(a)(1)(E)]

10 (8) VHBP has conducted wetland and stream delineations at the locations of the
11 MET stations and along access roads leading to these sites. The measurement station
12 sites will not be located near any streams. GMP will work to assure that any potential
13 stream crossings will be maintained according to Acceptable Management Practices.
14 Additionally, development and implementation of the EPSC plan under the Stormwater
15 Permit for the MET station sites and access roads will ensure no undue or adverse
16 impacts will result from this Project.

17 Shorelines

18 [10 V.S.A. §6086(a)(1)(F)]

19 (9) Shorelines are defined under Act 250 as incorporated into Section 248, as the
20 land adjacent to the waters of lakes, ponds, reservoirs, and rivers. Shorelines shall
21 include the land between the mean high water mark and the low water mark of such
22 waters (Argentine, 1998). No activities for the Project are proposed to take place within
23 areas defined as shorelines. As such, there will be no undue or adverse impacts to
24 shorelines as a result of the Project specified in 10 V.S.A. §6086(a)(1)(F).

1

Wetlands

2

[10 V.S.A. §6086(a)(1)(G)]

3

(10) The wetlands criterion for an Act 250 Permit, as incorporated into Section

4

248, requires that the proposed project comply with the Vermont Wetland Rules

5

(“VWR”). The VWR regulates significant wetlands (Class One and Class Two wetlands)

6

and their buffers. As with the stream criterion under Section 1(E) above, VHBP has

7

delineated all surface waters, including wetlands within the vicinity of the meteorological

8

station sites or access roads. All delineated wetlands within these areas are Class Three

9

and the Project will therefore not trigger review under the VWR. Furthermore, the

10

measurement station sites and access roads will not be located within any of these Class

11

Three wetlands. Because no significant wetland impacts are anticipated, there will be no

12

undue or adverse impacts to identified wetlands as a result of the Project. See Exh. GMP-

13

DP-2.

14

Sufficiency of Water and Burden on Existing Water Supply

15

[10 V.S.A. §6086(a)(2) and (3)]

16

(11) These criteria are inapplicable because the Project will not require the use of

17

water.

18

Soil Erosion

19

[10 V.S.A. §6086(a)(4)]

20

(12) In order to satisfy the soil erosion criterion for Section 248 review, a

21

project must not cause unreasonable soil erosion or cause significant drainage or run-off

22

problems. The effects of soil erosion on adjacent water bodies and wetlands will be

23

managed in accordance within the Project’s EPSC Plan. The EPSC Plan will include the

24

installation of preventative measures, monitoring and maintenance of the measures,

1 inspections and proactive action taken to address areas that pose significant erosion
2 potential. Through implementation of the EPSC Plan, the Project will not cause
3 unreasonable soil erosion or reduction in the capacity of the land to hold water so that a
4 dangerous or unhealthy condition may result.

5
6 Soil disturbance in connection with the Project, as described by Ms. Staskus, will be
7 limited and located only in the area of the temporary measurement station locations and
8 along new access roads. Access to the sites, as discussed above, will be largely along
9 existing logging haul roads and wood roads. New access roads will be constructed and
10 maintained according to Acceptable Management Practices and stabilized according to
11 the EPSC Plan. In connection with any tree clearing necessary at the tower sites, stumps
12 and other brushy ground cover will be left in place, with no significant stumping or
13 grubbing activities proposed. Logs may be removed by the landowner at its option.
14 Brush that is cut will be spread out, providing ground cover or used for stabilization as
15 mentioned above.

16 **Rare and Irreplaceable Natural Areas (RINA) (10 V.S.A § 6086(a)(8)) and**
17 **Necessary Wildlife Habitat and Endangered Species ((10 V.S.A § 6086(a)(8)(A))**
18

19 (13) In order to meet the criteria for rare and irreplaceable natural areas and
20 necessary wildlife habitat and endangered species under Section 248 review, a project
21 must be shown to have no undue adverse impacts upon these criteria. VHBP has
22 coordinated with Non-game and Natural Heritage Program (“NNHP”) regarding known
23 elemental occurrences of rare, threatened, and endangered (“RTE”) plants, as well as
24 necessary wildlife habitat. The NNHP has no listings of any federally or state protected

1 plant species within the locations of the MET stations or access roads. A field survey
2 conducted by VHBP for occurrences of RTE plants confirms the NNHP records.
3
4 Vermont Fish and Wildlife has mapped areas of Montane Spruce-fir Forest community
5 (S3 rank) at discreet locations along the ridgeline. Site B is the only MET station site
6 located within this mapped habitat type. Site A is located within an open canopy stand of
7 yellow birch, paper birch, and sugar maple with hobblebush in the understory. Site C is
8 also located within an open canopy of yellow birch with wood fern forming nearly a
9 closed cover within the herbaceous layer of the understory. As indicated above, only
10 minimal tree clearing will be required for installation of the MET stations, particularly at
11 Site B, where the overstory of spruce and fir had been cleared some 5 years ago for
12 installation of a meteorological station for a previous study. Regeneration of spruce and
13 fir saplings in this area is robust, and since the MET station at Site B will be installed at
14 the same location as the previous measurement site, any additional clearing of spruce and
15 fir will not be significant. In addition, given that the access routes to the meteorological
16 station sites will largely utilize existing logging roads with limited clearing necessary for
17 new access roads, it is my opinion that there will be no undue adverse impact to
18 necessary wildlife habitat, including potential habitat for both black bear and white-tailed
19 deer. In addition, as mentioned under Section 1(G) wetlands above, there is no
20 anticipated impact to wetlands that may be utilized by black bears. Therefore, the Project
21 will not cause undue adverse impact to rare and irreplaceable natural areas and necessary
22 wildlife habitat and endangered species.
23

1 **8. Q. Does the Project require any collateral permits relating to the criteria you**
2 **address above?**

3 A. Yes, as mentioned above, the Project will require coverage under the Stormwater
4 Permit and, as part of this permit, an EPSC Plan will be prepared, along with a Notice of
5 Intent (“NOI”) for authorization by DEC. GMP will file with the Board DEC’s issuance
6 of authorization to discharge before any site preparation or construction.

7

8 **9. Q. Does this conclude your testimony?**

9 A. Yes it does.