

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Joint Petition of Green Mountain Power Corporation,)	
Vermont Electric Cooperative, Inc., Vermont Electric)	October 22, 2010
Power Company, Inc., and Vermont Transco LLC,)	
for a Certificate of Public Good, pursuant to 30 V.S.A.)	Docket No. 7628
Section 248, for authority 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.)	

**PREFILED TESTIMONY OF GAIL HENDERSON-KING
ON BEHALF OF CRAFTSBURY, VERMONT**

Summary:

Ms. Henderson-King provides a description of the current visual character of the Town of Craftsbury, and explains that the aesthetics analysis provided by GMP does not adequately depict the visibility of the project from Craftsbury. Ms. Henderson-King provides a photo montage depicting the proposed project from Craftsbury.

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Joint Petition of Green Mountain Power Corporation,)	
Vermont Electric Cooperative, Inc., Vermont Electric)	October 22, 2010
Power Company, Inc., and Vermont Transco LLC,)	
for a Certificate of Public Good, pursuant to 30 V.S.A.)	Docket No. 7628
Section 248, for authority 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.)	

**PREFILED TESTIMONY OF GAIL HENDERSON-KING
ON BEHALF OF CRAFTSBURY, VERMONT**

1 **Q1 Please state your name.**

2 A1 Gail Henderson-King.

3

4 **Q2 What is your place of residence and your address?**

5 A2 I live at 592 Martindale Road in Shelburne, VT.

6

7 **Q3 What is your occupation?**

8 A3 I am a senior landscape architect and planner with Lamoureux & Dickinson
9 Consulting Engineers in Essex, VT.

10

11 **Q4 What is your educational background?**

12 A4 My resume has been submitted as Exhibit CFT-GHK-1. To summarize, I
13 graduated from the College of the Atlantic in 1982 with a Bachelor's Degree in
14 Human Ecology, and with a focus on environmental sciences and art. In 1989, I
15 received a Master's Degree in Landscape Architecture from Cornell University.
16 In 1993, I passed the Landscape Architecture Registration Exam (L.A.R.E.), a
17 national exam required for landscape architects. I am now a licensed Landscape
18 Architect in Vermont and Massachusetts.

19

1 **Q5 Do you have professional experience in assessing impacts under Criterion 8**
2 **of Act 250?**

3 A5 Yes, I have extensive experience in assessing impacts under Criterion 8 of Act
4 250 and for local permitting requirements for various development projects in the
5 State of Vermont. In addition, as the former Planning Director for the Town of
6 Milton, I was involved with local and state permitting efforts to bring Husky
7 Injection Molding Systems, Ltd. to the town. I also prepared and participated in
8 the Act 250 application and hearings regarding the town's proposed wastewater
9 treatment plant and collection system expansion.

10
11 **Q6 What are some recent projects involving aesthetic impact assessment or**
12 **scenic resource planning in which you have been involved?**

13 A6 Several recent projects that I have been involved with that have involved
14 preparing an aesthetic impact assessment are the Finney Crossing Mixed Use
15 Development proposed in Williston's growth center, the Lodge at Otter Creek
16 development in Middlebury, and the Orchards 16 planned unit development in
17 South Burlington.

18
19 I have provided testimony on behalf of the Town of Shelburne and the Shelburne
20 Museum in the VELCO Northwest Reliability Project (NRP) Section 248 (Docket
21 #6860) proceedings on the issue of aesthetics, focusing on the impact that
22 VELCO's transmission lines would have on the viewsheds in the Town of
23 Shelburne, the Shelburne Museum and from the *Ticonderoga*, which is a National
24 Historic Landmark. I also recently provided testimony in the VERMONT
25 TRANSCO, LLC case regarding scenic preservation for the condemnation
26 easement rights for the VELCO NRP project on the Katherine Arthaud property in
27 Charlotte, Vermont; and provided assistance to the Meadows' Edge Homeowners
28 Association regarding the aesthetic impacts of the FairPoint Telecommunications
29 Tower (PSB Docket No. 7527) proposed for Bixby Hill in Essex.

30

1 I have also provided testimony in the Environmental Court case of the Town of
2 Milton v. Bell Atlantic Cellular Division regarding aesthetic impacts of a
3 proposed cell tower on Georgia Mountain in 2000.
4

5 **Q7 What is your understanding of Green Mountain Power’s (GMP) Petition to**
6 **the Public Service Board known as the Kingdom Community Wind Project**
7 **in the Town of Lowell?**

8 A7 Green Mountain Power, Inc. has submitted a Petition to the Public Service Board
9 under Section 248 for the construction of the Kingdom Community Wind Project
10 located in the Town of Lowell. This project is proposed to consist of up to twenty
11 one 2.5-3.0 megawatt turbines to be located on 3.2 miles of the Lowell Mountain
12 ridgeline at elevations ranging from 2,190 to 2,640 feet. The proposed turbines
13 will have 262 to 279 foot support towers with rotors 295 to 328 feet in diameter.
14 The overall height of the turbines from the ground or base to the tip of a blade in
15 its highest position will range from 410 to 443 feet tall.
16

17 Because the Federal Aviation Administration (FAA) standards require lighting for
18 all structures above 200 feet in height, there will be some type of flashing red
19 night lights mounted at the top of the support tower on the nacelle on
20 approximately 9 of the wind turbines. There will also be clearing along the
21 ridgeline for an access road and associated transmission lines.
22

23 **Q8 Can you describe the visual character of the Town of Craftsbury.**

24 A8 The Town of Craftsbury is a rural community comprised of wooded mountains
25 and hills interspersed with open fields, active farms, and water bodies: ponds,
26 rivers and streams. There is a rich diversity of flora and fauna within the
27 community. The open fields, active farms and water bodies scattered between the
28 mountains and hills create a very visually diverse landscape that is highly valued
29 by its residents, as documented in the Craftsbury Town Plan and other planning
30 documents.
31

1 While the Lowell Mountain ridgeline resides in the surrounding communities of
2 Eden and Lowell, they have a strong presence throughout Craftsbury. In addition,
3 these mountains and the rolling hills throughout Craftsbury enhance the contrast
4 between the foreground, middle and background views within the landscape and
5 are dramatic in varying weather conditions and throughout the seasons.

6
7 Located in Craftsbury Village is the Craftsbury Common, an actively used public
8 space. A farmer's market attracts local residents and a large antiques annual event
9 with over 100 vendors draws a very large crowd. Also, The Center of Agricultural
10 Economy, located in Hardwick, has become a regional agricultural draw and as a
11 result, Craftsbury has seen an increase in tourism.

12
13 Craftsbury is known as a destination community attracting visitors in all seasons.
14 Visitors typically access Craftsbury Common and its surroundings via Craftsbury
15 Road off of Route 14, a major north south route between Hardwick and Irasburg.
16 Views of Craftsbury countryside are visible from Route 14 and Craftsbury Road.
17 The stunning fall foliage juxtaposed against rolling fields and meadows with
18 mountains to the west and east is sought after by visitors from near and far.

19
20 Snowmobiling and hunting are two activities that have large draws in the fall and
21 winter. The Vermont Association of Snow Travelers (VAST) has an extensive
22 network of trails in the Craftsbury area. Winter skiing and summer sculling are
23 big draws to the Craftsbury Outdoor Center located on Great Hosmer Pond. Water
24 related activities, such as boating, canoeing and fishing, as well as bike tours also
25 draw people to Craftsbury in the summer and fall.

26
27 The landscape views of the Lowell Mountains and surrounding areas from many
28 of the recreational areas in Craftsbury contribute to the "borrowed landscape
29 views" that are sought after by bus and bike tour groups and are important to the
30 character of Craftsbury. It is also home to Sterling College, a small private college

1 that has strong ties to the community and surrounding environment. The college
2 has used the Lowell Mountains for outdoor study for over thirty years.

3
4 In sum, the visual landscape in Craftsbury is a rural, agricultural and natural
5 setting. There are no large industrial developments, nor are there views of large
6 industrial infrastructure in the landscape on par with the proposed project. The
7 Lowell Mountains provide a natural backdrop from many areas of the Town, and
8 contribute to the sense of place and economy of the town.

9

10 **Q9: Where will the wind turbines be visible from in Craftsbury?**

11 A9: Based on field observations, the wind turbines will be visible from different areas
12 along Route 14, in Craftsbury Common, East Craftsbury and other northeastern
13 locations. The wind turbines would form a somewhat consistent spine along the
14 Lowell Mountain ridgeline that will draw one's eye to it, particularly when the
15 turbines are active. And at a 443 foot maximum height, they would certainly be
16 visible from all areas where the Lowell Mountain ridgeline is visible today in
17 Craftsbury.

18

19 I have reviewed Mr. Raphael's report on the projected views of the Kingdom
20 Community Wind project, including Appendices 3 and 7 to the report, which
21 depict where the project's wind turbines may potentially be visible from in open
22 areas and roadways within a 10 mile radius of the project area. These plans appear
23 to be a limited approximation as to where the wind turbines will be visible within
24 the Craftsbury community. With 400+ foot high wind turbines being placed
25 mostly along the top of the Lowell Mountain ridgeline, I believe there will be
26 greater visibility than is depicted in Mr. Raphael's report: for example North
27 Craftsbury Road, Strong Road, Route 14 to name a few areas. There will also be
28 more visibility in the approximately six months of the year where deciduous tree
29 cover is barren, as the shape of the ridgeline will be changing due to the grading
30 work needed for the access road and installation of the turbines.

31

1 **Q10 Have you prepared any exhibits?**

2 A10 Yes. I have prepared a photo montage: Exhibit CFT-GHK-2 documenting views
3 to the Lowell Mountain ridgeline from several public vantage points in Craftsbury
4 and Exhibit CFT-GHK-3 which is a simulation of the proposed Kingdom
5 Community Wind Project from North Craftsbury Road. The simulation was
6 created with assistance from Brian Tremback of Lamoureux & Dickinson.

7
8 **Q11 How did you create the simulation exhibit?**

9 A11 The simulation was created first by using AutoCAD. The proposed wind turbine
10 locations were located on a base plan using available GIS DEM and topographical
11 data. From this, we determined the geographical coordinates of the wind turbines
12 and used this information to plot their locations in Google Earth.

13
14 Three dimensional models of the wind turbines were developed in SketchUp 7
15 based on the information in the Kingdom Community Wind Project's petition and
16 exhibits. These wind turbine models were then brought into Google Earth and
17 placed at the geographical coordinates identified in AutoCAD.

18
19 In Google Earth, we created a model view from the selected photographed
20 location: North Craftsbury Road and Strong Road. Using the photograph in
21 Photoshop 7, we modified it by adding the images of the wind turbines to match
22 the model view.

23
24 This simulation captures what the wind turbines will approximately look like on a
25 stormy day. They will appear more dramatic on a sunny day as there would be
26 more contrast of the light colored turbines against a blue sky.

27
28 **Q12 What aspects of the project do you think should be considered by the PSB in
29 regards to Craftsbury?**

30 A12 It has been acknowledged by GMP and its consultants that the Town of
31 Craftsbury is within the 10 mile radius of visibility of the project. There will most

1 likely be more visibility of the wind turbines throughout Craftsbury than is
2 depicted by GMP's testimony, and this visibility will be a change from the
3 currently undisturbed ridgeline of the Lowell Mountains. The clearing needed for
4 installation will change their overall appearance and the reforestation plans should
5 be closely reviewed.

6

7 The testimony of GMP's consultants are somewhat vague on what type of lighting
8 will be required by the FAA other than to state that the use of red lights at night
9 are less intrusive and are used on other similar towers in Vermont (Waterbury
10 radio towers is one noted example). Because it is a rural community without
11 major cities or towns nearby, the addition of night lights could contribute to light
12 pollution. In my opinion, GMP has not adequately addressed the potential
13 aesthetic impacts of this light pollution on surrounding areas.

14

15 **Q13 Does this conclude your testimony?**

16 A13 Yes.