

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Docket No. _____

Petition of Deerfield Wind, LLC for a Certificate)
of Public Good pursuant to 30 V.S.A. section 248,)
authorizing it to construct up to a 45 MW wind electric)
generation facility, and associated transmission and)
interconnection facilities, in Searsburg and Readsboro,)
Vermont, and operate the same.)

**PREFILED DIRECT TESTIMONY OF
JAMES W. BROWN**

ON BEHALF OF DEERFIELD WIND, LLC

January 8, 2007

Summary:

Mr. Brown describes the agreement between Deerfield Wind, LLC and Green Mountain Power concerning the purchase of power from the proposed Deerfield Wind Project, explaining why there is a need for this power and how this agreement is in the interest of Green Mountain Power and its ratepayers. Mr. Brown also discusses the potential effects of the wind project on Green Mountain Power's infrastructure assets and electrical facilities associated with the existing Searsburg wind facility.

1 **Q. What is your name, occupation, and business address?**

2 Response. My name is James W. Brown, and I am Manager of Energy Resource
3 Planning at Green Mountain Power Corporation (“Green Mountain Power” or the
4 “Company”), 163 Acorn Lane, in Colchester, Vermont.

5
6 **Q. Please describe your educational background and business experience.**

7 Response. I graduated from the University of Vermont with a Bachelor of Science
8 Degree with honors in 1980. I received a Masters in Business Administration from
9 UVM in 1985. I have been employed with Green Mountain Power since July of
10 1999 as the Manager of Energy Resource Planning. I am responsible for Green
11 Mountain Power’s power planning and trading, rate design, load management and
12 general economic analysis. From 1987 through June of 1999 I consulted full time,
13 primarily with municipal electric utilities. I was employed by the Burlington Electric
14 Department from 1980 through 1986, starting as Administrative Assistant, then as
15 Director of Rates and Economic Research, and finally as Supervisor of Power
16 Planning and Rates. I have served on the VPPSA Board of Directors, the APPA
17 DEED program board and the board of VEIC. I am a member of the American
18 Economic Association and the National Association for Energy Economics.

19

20 **Q. Have you previously testified before the Public Service Board (“Board”)?**

21 Response. Yes, I have testified before the Board on numerous occasions throughout
22 my career, including Docket No. 6895 and Docket No. 6958. The topics I have

1 testified on include power supply and integrated resource planning, power contracts,
2 load forecasting, rate design, cost allocation and demand-side management.

3

4 **Q. What is the purpose of your testimony?**

5 Response. I describe the current status of proposed arrangements for the sale of
6 power from the proposed Deerfield Wind Project by Deerfield Wind, LLC
7 (“Deerfield”) to Green Mountain Power, and I explain why there is a need for this
8 power and how this agreement is in the interest of the Company and its ratepayers. I
9 also discuss the potential effects of the wind project on the Company’s facilities
10 associated with the existing Searsburg wind facility.

11

12 **Q. Please describe the current status of proposed arrangements for the sale of**
13 **power from the proposed Deerfield Wind Project to Green Mountain Power.**

14 Response. The Company and Deerfield recently entered into a Letter of Intent, as
15 amended (“LOI”) relating to the sale of power from the Deerfield Wind Project.

16 ***Exhibit DFLD-JB-1.*** Under the LOI, the Company and Deerfield agree to
17 negotiate in good faith an arrangement for the sale to the Company of up to 50% of
18 the energy and environmental attributes produced by the Project, under terms to be
19 negotiated and to be reflected in a definitive power purchase agreement. The
20 agreement would automatically terminate as of December 31, 2007, if federal
21 legislation has not been enacted by that date providing for an extension of tax credits
22 for wind energy facilities placed in service before December 31, 2008. The LOI
23 expires on August 1, 2007, unless earlier terminated by either party. The Company

1 and Deerfield have also executed an Option for Easement Agreement (“Option”).

2 ***Exhibit DFLD-JB-2***. Under the Option, Green Mountain Power granted Deerfield
3 an option to acquire easements over certain property for the purpose of accessing
4 the Deerfield Wind Project and existing substation, and locating transmission lines.
5 The Option expires in December of 2009, but Deerfield may extend it for another
6 two years if it has obtained a certificate of public good by the initial expiration date.

7

8 **Q. Why did Green Mountain Power seek power from the Deerfield Wind Project?**

9 Response. Green Mountain Power has long been interested in wind power. In
10 1976, for instance, it started a wind research program to determine the viability of
11 obtaining part of its energy supply from wind turbines.

12 Several factors led to Green Mountain Power's interest in power from the
13 Deerfield Wind Project. First, the purchase of wind power is consistent with Green
14 Mountain Power's Environmental Commitment Statement, which describes the
15 Company's goal to be a leader in providing clean, renewable energy sources, to
16 develop products and services that help its customers protect the environment, and
17 to improve continuously its environmental performance. See 2005 Corporate
18 Responsibility Report, attached as ***Exhibit DFLD-JB-3***. In addition, increasing
19 reliance on renewable resources is likely to decrease long-term economic risks to
20 ratepayers, including the risks of more costly environmental regulations and price
21 volatility affecting fossil fuel-based power.

22 At present, 40% of the Company's fuel mix comes from hydro, biomass
23 (wood), and wind generation. When our Vermont Yankee and Hydro-Québec

1 contracts (accounting for almost two-thirds of the Company's energy supply) expire
2 in 2012 and 2015, respectively, the Company will be faced with challenges in
3 maintaining a power supply portfolio as emissions-free as it is today. Investigating
4 and securing new sources of emissions-free power is important in planning for the
5 future.

6 We are also interested in the Deerfield Wind Project because new wind
7 power purchases will help the Company comply with Vermont's Renewable
8 Portfolio Standard ("RPS"), enacted in 2004 as part of Act 61. The RPS will require
9 the Company to secure entitlements in qualifying renewable resources equal to the
10 lesser of retail load growth between 2005 and 2012 or 10% of 2005 load.

11

12 **Q. Is this purchase of wind power consistent with the Company's Least Cost**
13 **Integrated Resource Plan ("IRP")?**

14 Response. Yes. The goals of the Company's 2003 IRP Action Plan include
15 development of a "portfolio of fixed price, non-gas-price-indexed contracts, or non-
16 gas fueled assets," and specifically states that the Company should "assess the merits
17 of acquiring additional renewable resources, such as wind power." The IRP is
18 attached as ***Exhibit DFLD-JB-4***.

19

20 **Q. Will the proposed Deerfield Wind Project have an undue adverse impact on**
21 **the Company's substation, transmission lines, or other electrical facilities associated**
22 **with the existing Searsburg wind facility?**

1 Response. No, it will not have an undue adverse impact, as explained in the prefiled
2 direct testimony of David Estey of E/PRO Engineering. He states that the Project
3 is actually expected to improve system reliability at no additional cost.

4

5 **Q. Will the Deerfield Wind Project have any undue adverse impact on the**
6 **Company's access roads, including its ability to operate its existing facility?**

7 Response. The Project will require minor widening of the existing access road to
8 ensure adequate width for safe passage of oversize loads. Depending on the exact
9 specifications for the turbines ultimately selected for this project and the hauling
10 equipment used to transport it, it may also be necessary to reduce the sharpness of
11 the first turn in the existing road as it leaves the existing substation area at the
12 bottom of the hill. This widening would require shifting the road to straighten the
13 turns where necessary. These changes are discussed in the prefiled direct testimony
14 of Jason Krzanowski.

15 We do not anticipate that any of these changes would negatively impact the
16 Company's operation of the existing Searsburg facility, and Deerfield will bear the
17 cost of the modifications.

18

19 **Q. Does this conclude your testimony at this time?**

20 Response. Yes.

21