

**STATE OF VERMONT  
PUBLIC SERVICE BOARD**

Docket No. 7250

Amended Petition of Deerfield Wind, LLC, for a )  
certificate of public good authorizing it to construct and )  
operate a 17-turbine, 34-35.7 MW wind generation )  
facility, and associated transmission and interconnection )  
facilities, on approximately 80 acres in the Green )  
Mountain National Forest, located in Searsburg and )  
Readsboro, Vermont, with 7 turbines to be placed on the )  
east side of Route 8 on the same ridgeline as the existing )  
GMP Searsburg wind facility (Eastern Project Area), and )  
10 turbines along the ridgeline to the west of Route 8 in )  
the northwesterly orientation (Western Project Area) )

**SUBSTITUTE PREFILED DIRECT TESTIMONY OF  
DOUGLAS C. SMITH**

**ON BEHALF OF DEERFIELD WIND, LLC**

December 4, 2007

Summary:

Mr. Smith is substituting his testimony for the Direct Testimony previously filed by James Brown of GMP. He describes the agreement between Deerfield Wind, LLC and Green Mountain Power concerning the purchase of power from the proposed Deerfield Wind Project. He explains why there is a need for this power and how this agreement is in the interest of Green Mountain Power and its ratepayers. Mr. Smith 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 Douglas C. Smith, 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 have worked for 20 years in the electric industry, focusing on topics that  
8 include system and portfolio planning, wholesale and retail power transactions, and  
9 market price forecasting. I hold a Bachelor of Science degree in Mechanical  
10 Engineering from Brown University.

11 I began my career as an analyst at the Vermont Department of Public Service  
12 and was subsequently promoted to the position of Electrical Planning Engineer.  
13 From 1991 to 2007 I worked at La Capra Associates (“La Capra”), a Boston-based  
14 consulting firm that specializes in planning and regulatory issues in the electric  
15 industry, first as an analyst and ultimately as the Technical Director. At La Capra I  
16 advised several utilities in Vermont regarding their power transactions and risk  
17 management strategies, and assisted several Vermont utilities in the development of  
18 Integrated Resource Plans. On behalf of state agencies and large electricity  
19 customers, while at La Capra I reviewed the procurement strategies of numerous  
20 large utilities in the central and western U.S.

21 I joined Green Mountain Power in May of 2007 as the Manager of Energy  
22 Resource Planning and Rates. I have primary responsibility for Green Mountain

1 Power's power planning and trading, rate design, load management and general  
2 economic analysis.

3

4 **Q. Have you previously testified before the Public Service Board ("Board")?**

5 Response. Yes, I have testified before the Board on numerous occasions, most  
6 recently in Docket 7176 regarding GMP's Alternative Regulation plan. The topics I  
7 have testified on include integrated resource planning, power contracts, rate cases,  
8 and transmission issues.

9

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

11 Response. My testimony is in substitution of the previously-filed direct testimony of  
12 James Brown, who is no longer with Green Mountain Power. I describe the current  
13 status of proposed arrangements for the sale of power from the proposed Deerfield  
14 Wind Project by Deerfield Wind, LLC ("Deerfield") to Green Mountain Power, and  
15 I explain why there is a need for this power and how this agreement is in the interest  
16 of the Company and its ratepayers. I also discuss the potential effects of the  
17 proposed wind project on the Company's facilities associated with the existing  
18 Searsburg wind plant.

19

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

22 Response. Green Mountain Power and Deerfield have entered into a Letter of  
23 Intent ("LOI"), as amended and restated, relating to the sale of power from the

1 Deerfield Wind Project. **Exhibit DFLD-DS-1** (formerly Ex. DFLD-JB-1). Under  
2 the LOI, Green Mountain Power and Deerfield agree to negotiate in good faith an  
3 arrangement for the sale to Green Mountain Power of up to 50 percent of the energy  
4 and environmental attributes produced by the Project, under terms to be negotiated  
5 and to be reflected in a definitive power purchase agreement. The LOI features an  
6 exclusive period for negotiation which will expire on December 31, 2007 unless  
7 earlier terminated by either party. It also addresses the present uncertainty regarding  
8 whether (and in what form) the current federal production tax credit for wind  
9 production will be extended.

10 Green Mountain Power and Deerfield have also executed an Option for  
11 Easement Agreement (“Option”). **Exhibit DFLD-DS-2** (formerly Ex. DFLD-JB-  
12 2). Under the Option, Green Mountain Power granted Deerfield an option to  
13 acquire easements over certain property for the purpose of accessing the Deerfield  
14 Wind Project and existing substation, and locating transmission lines. The Option  
15 expires in December of 2009, but Deerfield may extend it for another two years if it  
16 has obtained a certificate of public good by the initial expiration date.

17

18 **Q. Why is Green Mountain Power seeking to purchase power and/or**  
19 **environmental attributes from the Deerfield Wind Project?**

20 Response. Green Mountain Power has long been interested in wind power. In  
21 1976, for instance, it started a wind research program to determine the viability of  
22 obtaining part of its energy supply from wind turbines.

1           Several factors led to Green Mountain Power's interest in power from the  
2           Deerfield Wind Project. First, the purchase of wind power is consistent with the  
3           Company's Environmental Commitment Statement, which describes its goal to be a  
4           leader in providing clean, renewable energy sources, to develop products and services  
5           that help its customers protect the environment, and continuously to improve its  
6           environmental performance. See GMP's second Corporate Responsibility Report,  
7           attached as **Exhibit DFLD-DS-3** (formerly Ex. DFLD-JB-3). In addition,  
8           increasing reliance on renewable resources has the potential to decrease long-term  
9           economic risks to ratepayers, including the risks of more costly environmental  
10          regulations and price volatility affecting fossil fuel-based power.

11           At present, over 40 percent of the Company's fuel mix comes from hydro,  
12          biomass (wood), and wind generation. When our Vermont Yankee and Hydro-  
13          Québec contracts (accounting for almost two-thirds of the Company's energy  
14          supply) expire in 2012 and 2015, respectively, the Company will be faced with  
15          challenges in maintaining a power supply portfolio as emissions-free as it is today.  
16          Investigating and securing new sources of emissions-free or low-emission power is  
17          important in planning for the future.

18           We are also interested in the Deerfield Wind Project because new wind  
19          power purchases would help the Company comply with the provisions of Act 61,  
20          which requires Vermont utilities to secure entitlements in qualifying renewable  
21          resources equal to the lesser of: (a) retail load growth between 2005 and 2012; and  
22          (b) 10 percent of 2005 load.

23

1 **Q. Would the purchase of wind power be consistent with the Company's Least**  
2 **Cost Integrated Resource Plan ("IRP")?**

3 Response. Yes, if the price is reasonable. As discussed in the Company's 2007 IRP,  
4 which is presently under review by the Department of Public Service, one of Green  
5 Mountain Power's goals is to continue to purchase energy principally from non-  
6 emitting or low-emitting sources. The IRP scenario analysis suggests that robust  
7 resource portfolios will include a significant amount of renewable generation, to the  
8 extent that it can be developed or purchased cost-effectively. The IRP therefore  
9 identifies the pursuit of renewable generation (including wind) as one of several types  
10 of supply resources that will have priority in the Company's planning in the next few  
11 years. The IRP action plan includes exploring opportunities for power purchase  
12 agreements with renewable energy sources. The Executive Summary of the 2007  
13 IRP is attached as ***Exhibit DFLD-DS-4***

14 A purchase of wind power at reasonable prices would also be consistent with  
15 the Company's most recently approved IRP, which was issued in 2003 and  
16 supplemented in 2004. The 2003 IRP action plan specifically stated that the  
17 Company should "assess the merits of acquiring additional renewable resources, such  
18 as wind power."

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**  
22 **associated 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. His testimony indicates  
3        that the Project is actually expected to improve transmission system reliability at no  
4        additional cost.

5

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

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

16                While the specific road modifications remain to be finalized, we do not  
17        anticipate that any of these changes would negatively impact the Company's  
18        operation of the existing Searsburg facility, and Deerfield will bear the cost of the  
19        modifications. Notably, the Option includes several provisions to mitigate potential  
20        costs to Green Mountain Power associated with the Deerfield project, including:

- 21                ○ Deerfield Wind is obligated to take reasonable measures to minimize  
22                        disruption to Searsburg operation in connection with using the easements  
23                        granted by the Company;

- 1                   ○ Deerfield Wind is required to reimburse Green Mountain Power for any  
2                   lost energy production at then-current market prices;  
3                   ○ Deerfield Wind is responsible for reasonable costs associated with its use  
4                   of the Easements, including the cost of upgrading the existing access  
5                   road. Deerfield Wind and the Company shall agree on a cost sharing  
6                   arrangement regarding maintenance of the access road.

7

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

9    Response. Yes.