

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7250

Petition of Deerfield Wind, LLC for a Certificate of Public Good)
authorizing it to construct up to a 45 MW wind generation facility,)
and associated transmission and interconnection facilities,)
comprised of between 15 and 24 wind turbines on approximately 80)
acres in the Green Mountain National Forest, located in Searsburg)
and Readsboro, with turbines to be placed both on the east side of)
Route 8 on the same ridgeline as the existing GMP Searsburg wind)
facility Eastern Project Area), and along the ridgeline to the west of)
Route 8 in a northwesterly orientation (Western Project Area))

**PREFILED SUPPLEMENTAL DIRECT TESTIMONY OF
EZRA D. HAUSMAN, Ph.D.**

ON BEHALF OF DEERFIELD WIND, LLC

July 30, 2007

Summary:

Mr. Hausman testifies regarding 10 V.S.A. § 248(b)(2) and (b)(4). He discusses his review of the revised project layout and its effect, if any, on his original assessment of the need for the Project, its economic benefits, and displaced air emissions.

1 **Q. Please state your name.**

2 Response. Dr. Ezra D. Hausman

3

4 **Q. Have you previously submitted direct testimony in this matter?**

5 Response. Yes.

6

7 **Q. What is the purpose of your supplemental testimony?**

8 Response. Deerfield Wind, LLC., has produced a revised project layout for the
9 Deerfield Wind Project. I present this supplemental testimony to discuss how this
10 layout affects the conclusions reached in my previously-filed direct testimony.

11

12 **Q. Have you reviewed the revised project layout dated June 2007, consisting of 17
13 turbines (10 on the western string and 7 on the eastern string)?**

14 Response. Yes.

15

16 **Q. How, if at all, is the revised project different from the project that you
17 assessed in your original testimony and report?**

18 Response. At the time that I filed my original report and testimony, Deerfield had
19 not announced a final project capacity. At the time the Project was described as
20 providing between 30 and 45 Megawatts (MW) of wind power capacity. The project
21 capacity has now been identified as 34 MW.

22

1 **Q. Do the revisions to the Project alter your original conclusion that there is a**
2 **need for the Project? Please explain.**

3 Response. They do not. My original conclusion was that there is a need for new
4 sources of power, and particularly for renewable sources of power, which could
5 easily accommodate a wind facility of between 30 and 45 MW in size. The Deerfield
6 Project's proposed capacity of 34 MW is within this range.

7

8 **Q. Do the revisions to the Project alter your original conclusion that the Project**
9 **will result in an economic benefit to Vermont and its ratepayers? Please**
10 **explain.**

11 Response. They do not. In my original testimony I concluded that the proposed
12 Project would provide benefits in terms of "reduction in harmful pollutant
13 emissions, reduced impact on global climate, and a reduction of risk associated with
14 fuel supply and volatile fuel prices" [Page 7, lines 1-3] and that these benefits could
15 be quantified economically following the logic and spirit of the Public Service
16 Board's Orders in Dockets 5270 and 5980. These benefits are unaffected by the
17 revisions to the Project. It is also my judgment that prices of fossil fuel-based
18 generation will continue to increase over the coming decades, as these fuels become
19 increasingly scarce and as the cost of CO₂ emissions becomes internalized in the cost
20 of producing electricity. Thus I conclude that the Project, as revised, will result in an
21 economic benefit to Vermont and its ratepayers.

22

1 **Q. Do the revisions to the Project alter your original conclusion that operation of**
2 **the Project will result in displaced air emissions that will have environmental**
3 **and economic benefits? Please explain.**

4 Response. They do not. The displaced air emissions associated with the Project as
5 revised, and the resulting economic benefit, would be within the range I identified in
6 my original testimony.

7
8 **Does the existence of the Regional Greenhouse Gas Initiative (RGGI) alter**
9 **your conclusions on the value of avoided air emissions associated with the**
10 **Project?**

11 Response. A cap-and-trade program such as RGGI does set a fixed target for air
12 emissions, so assuming the target is met, total air emissions in the RGGI region
13 would be independent of whether any particular project is in place. However, this
14 does not negate my conclusions, for a few reasons. First, it is quite possible that the
15 target will not be met. Under RGGI, there is a system of “safety valves” that would
16 allow emitters to pursue alternative compliance strategies if the price of carbon
17 allowances goes above certain pre-determined levels. Second, the RGGI program is
18 limited in geographic scope, so in the absence of sufficient low carbon resources in
19 the region, the net effect may be to replace in-region fossil resources with out-of-
20 region fossil resources. This issue is often referred to as “leakage,” and it would
21 significantly reduce the air emissions benefit of the RGGI initiative.

22 Finally, the presence of RGGI will explicitly translate the value of avoided
23 emissions into quantifiable economic benefits. When a project such as Deerfield

1 becomes available, it will decrease the demand for emissions permits by displacing
2 CO₂-emitting resources and will thus lower the cost of emissions allowances
3 throughout the State of Vermont and the RGGI region. While I have not attempted
4 to quantify this, it would be a direct and significant economic benefit that would
5 accrue to the ratepayers of Vermont resulting from the availability of emissions-free
6 energy.

7

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

9 Response. Yes, it does.