

**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 17 turbine,)
34 to 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))

**PREFILED REBUTTAL TESTIMONY OF
MICHAEL LEW-SMITH**

ON BEHALF OF DEERFIELD WIND, LLC

July 3, 2008

Summary:

Mr. Lew-Smith's rebuttal testimony responds to issues related to wetlands, surface waters, and RTE species raised by Mic Metz on behalf of the Agency of Natural Resources. In addition, Mr. Lew-Smith describes the results of his field assessments for the revised turbine and road layout.

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

2 Response: My name is Michael Lew-Smith. I am an environmental consultant with
3 the company Arrowwood Environmental located at 950 Bert White Road,
4 Huntington, Vermont

5
6 **Q. Have you previously prefiled testimony in this case?**

7 Response: Yes, I prefiled direct testimony (January 8, 2007) and supplemental direct
8 testimony (July 30, 2007).

9
10 **Q. What is the purpose of your rebuttal testimony?**

11 Response: The purpose of my rebuttal testimony is to respond to issues related to
12 wetlands, surface waters and rare, threatened and engendered species as raised by
13 Mic Metz on behalf of the Agency of Natural Resources. In addition, I will describe
14 the results of my field assessments on the revised 15-turbine and road layout.

15
16 **Q. Please describe any additional field work that you have undertaken since
17 filing your supplemental direct testimony in July 2007.**

18 Response: A site visit was conducted in the Fall of 2007 to review a few areas of
19 concern identified by Mic Metz. A site visit was also conducted in May 2008 to
20 show the major wetlands in the study area to state wetlands ecologists and U.S.
21 Forest service personnel. Finally, additional field work was conducted during June
22 2008 to assess areas of the revised (15-turbine) layout for wetlands and rare plant

1 species. The cumulative results of my field work are reflected in the revised
2 Environmental Assessment Maps, *Exhibit DFLD-MLS-6a-c*.

3

4 **Q. In his December 2007 testimony, Mr. Metz states that the ANR was at that**
5 **point awaiting further information regarding certain wetlands at the Project site that**
6 **you had determined to be non-jurisdictional (Metz pft at 2). Do you have any further**
7 **information?**

8 Response: In his testimony, Mr. Metz referred to some “small wet areas”. I
9 evaluated those areas in the field and determined that they were not jurisdictional
10 wetlands. More information on this site visit is included in *Exhibit DFLD-MLS-7*
11 (Wetland Update Letter 12-17-07).

12

13 **Q. Mr. Metz requested (apart from his testimony) that the site be investigated for**
14 **the presence of the 4-toed salamander, a Species of Concern in Vermont according to**
15 **the Department of Fish and Wildlife. Please summarize the results of your**
16 **investigation.**

17 Response: During the May 2008 site visit, three wetlands in the vicinity of proposed
18 turbine 4E were inventoried for the presence of the 4-toed salamander. Rebecca
19 Chalmers, one of the state wetland ecologists and an expert on this species, led this
20 inventory. No individuals of this species were discovered during that site visit. In
21 addition, Ms. Chalmers indicated that the wetlands surveyed do not support
22 appropriate habitat for this species.

23

1 **Q. Please describe the field work that you recently conducted in connection with**
2 **the 15-turbine revised layout.**

3 Response: In June 2008, Arrowwood Environmental conducted an assessment of
4 the areas involved in the revised layout. This assessment consisted of surveying the
5 centerline of the proposed impacted area (access road, turbine locations and
6 transmission corridor) and a 200-foot buffer around that centerline. These areas
7 were inventoried for wetlands and rare plant species.

8
9 **Q. What is the result of your June inventory?**

10 Response: No rare plant species were found during that inventory. Five additional
11 wetlands were discovered during that inventory and are shown on my revised
12 Environmental Assessment Maps, *Exhibit DFLD-MLS-6a-c*. All of these
13 wetlands are Class III wetlands, none of which are within the areas of proposed
14 impact. One wetland (Wetland BC) is a Shallow Emergent Marsh community that
15 occurs in an old field area behind the cemetery off of Rte 8, approximately 15 feet
16 from disturbance. The other wetlands (Wetlands BA, BB, BD and BE) are small
17 Seepage wetlands greater than 25 feet from proposed disturbance.

18 During the realignment for the 15-turbine layout, the road in near the Sleepy
19 Hollow and Rte 8 junction was redesigned. This realignment was necessary due to
20 property ownership issues. This realignment will result in 545 square feet of impact
21 to Wetland AA. This Class III wetland is a seepage type wetland dominated by
22 asters, spotted touch-me-nots and sensitive ferns. There is a small roadside ditch

1 that feeds into this wetland. I do not consider the proposed impacts to this wetland
2 to be undue or adverse.

3 Subsequent to my last field review, a few additional minor changes were
4 made to the Project layout in order to further reduce impacts to bear-scarred beech
5 habitat. As a result of these last-minute changes there are a few small areas in the
6 anticipated clearing limits for the Project that are slightly outside of our current
7 survey limits. These areas are immediately adjacent to the areas we have surveyed
8 thus far, and based on our general review of the resources in the surrounding area,
9 we do not anticipate any significant impacts in these limited locations. A
10 confirmatory review of these locations will be conducted.

11

12 **Q. Do the revisions to the Project layout alter your original conclusion that the**
13 **Project will not result in undue adverse impacts to wetlands, surface waters, rare and**
14 **irreplaceable natural communities, and rare, threatened and endangered plant**
15 **species?**

16 Response. No. Based on my review of the Project, it is my opinion that the revised
17 layout will not result in undue adverse impacts to wetlands, surface waters, rare and
18 irreplaceable natural communities or rare, threatened and endangered plant species.

19

20 **Q. Another Deerfield Witness from your firm, Jeffrey Parsons, has provided**
21 **rebuttal testimony concerning bear habitat in the project area, including oak stands.**
22 **Have you conducted any research on potential oak stands in the Project area?**

23 Response: Yes, I have.

1

2 **Q. Please explain the research you conducted and the methodology you used.**

3 Response: I surveyed potential oak stands using color infrared aerial photography
4 which was flown in the fall. The fall season allows stands dominated by oak to be
5 seen apart from other hardwood species. From the aerial photography, I digitized
6 rough boundaries of the oak forests using 1:5000 ortho photographs and
7 topographic maps as base maps. The area surveyed included an approximately 17-
8 mile radius around the proposed wind project but excluded areas north of Route 9.
9 Appropriate photography was not available to map oak stands further than 17 miles
10 south of the project area.

11

12 **Q. Is the methodology you used a reliable method for identifying oak stands?**

13 Response: Yes, it is fairly reliable due to the unique photo-signature of oak. I feel
14 fairly confident about the fact that oak is present at these sites. I don't feel confident
15 about estimating the percent of the site that is dominated by oak compared to other
16 species. On the map (*Exhibit DFLD-JP-3*) the sites labeled "Oak Forest" appear
17 to be dominated by oak. The stands labeled "Oak-Northern Hardwood" are likely
18 the Mesic Red Oak-Northern Hardwood forest communities where oak is co-
19 dominant with other hardwoods. In these communities, the proportion of oak
20 compared to other hardwoods varies depending on topography, soils, aspect,
21 management and land use history.

22

23 **Q. What were the results of your research?**

1 Response: A total of 15 different stands were delineated. Five of these stands are
2 west of the project area near Bennington, Vermont. Ten of the stands are south of
3 the project in Massachusetts. There are no large oak stands east of the project
4 because this area is dominated by the Green Mountains, where forest communities
5 are more mesic and dominated by northern hardwoods. While the boundaries drawn
6 are rough, these stands together comprise approximately 7900 acres of forest within
7 17 miles of the project site. The results and relevance of this data is discussed
8 further by Mr. Parsons and Mr. Wallin in their testimony.

9

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

11 Response. Yes, it does.