

**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
THOMAS E. KAVET**

ON BEHALF OF DEERFIELD WIND, LLC

July 3, 2008

Summary:

Mr. Kavet responds to issues related to the economic benefits and costs of the Project to Vermont and its residents that were raised by witnesses for the Town of Wilmington, Save Vermont Ridgelines, and Thomas Shea.

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

2 Response: Thomas E. Kavet, Economic and Public Policy Consultant and
3 President, Kavet, Rockler & Associates, LLC, 985 Grandview Road, Williamstown,
4 Vermont.

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

7 Response: No.
8

9 **Q. Please describe your background, experience, and qualifications.**

10 Response: I have been a professional economist for the past 29 years. I worked for
11 11 years at McGraw-Hill/DRI (now Global Insight), the largest economic consulting
12 and forecasting firm in the nation, where I started the Construction and Real Estate
13 Information Service and was later Vice President, Development and Product
14 Operations. I have been an independent economic consultant based in Vermont for
15 the past 18 years, during which time I have been the Consulting Economist to the
16 Vermont State Legislature for the past 12 years. My partner, Dr. Nicolas Rockler,
17 and I have extensive experience building and using regional economic models,
18 specifying econometric and applied regression models, and performing economic
19 impact analyses. We currently maintain and manage REMI, IMPLAN and REDYN
20 economic models for the State of Vermont, on behalf of the Vermont Legislative
21 Joint Fiscal Office. We have conducted hundreds of regional economic impact
22 analyses, including analyses associated with wind and other energy projects in
23 Vermont and other states. A copy of my resume is attached as *Exh. DFLD-TK-1*.

1

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

3 Response: To review testimony submitted to the PSB regarding economic impacts
4 associated with the Deerfield Wind project and to provide analysis and quantification
5 of likely regional economic impacts.

6

7 **Q. Have you conducted any analyses and produced any reports regarding the**
8 **Deerfield Wind Project?**

9 Response: Yes, I was asked by Deerfield Wind to conduct an economic analysis in
10 support of Deerfield Wind's application to the U.S. Forest Service for a Special Use
11 Permit for the proposed project. That report, entitled "Regional Economic Impact
12 Analysis for the Deerfield Wind Project Proposed by PPM Energy," was finalized in
13 February 2008. I understand that my report was provided to the parties in this case
14 through the discovery process.¹ Since that time, I have updated portions of my
15 report to reflect recent revisions in anticipated expenditures, project output
16 efficiency and the number of turbines planned. My updated report is attached here
17 as *Exhibit DFLD-TK-2*.

18

19 **Q. A number of parties – including Save Vermont Ridgelines, the Town of**
20 **Wilmington and Thomas Shea – have taken the position in their direct testimony**

¹ Discovery Document NH_049, provided on February 22, 2008 as a supplemental response to Save Vermont Ridgeline's First Set of Discovery Requests.

1 **that the Deerfield Wind Project will not provide an economic benefit to the State or**
2 **its residents, and to the contrary, will have negative economic impacts. Before**
3 **getting into the specific areas outlined in the questions below, do you have any**
4 **general remarks in response?**

5 Response: Yes. Our analysis indicates that the net economic impacts from this
6 project will be positive at the town, county, state and national levels. No credible
7 empirical information has been presented to date that would contradict these
8 findings.

9
10 **Impacts on the Local Economy, Tourism and Property Values**

11 **Q. Ms. Streeter, Ms. Matthews, and Mr. Rusten for the Town of Wilmington all**
12 **state that the Project will create few or no jobs for local residents (Streeter pft at 9;**
13 **Matthews pft at 4; Rusten pft at 12). How do you respond to this claim?**

14 Response: While no one can know for certain where employees of the new project
15 will reside, how far they may choose to commute, or exactly who may be hired to
16 perform construction and development work on the project, it is likely that some of
17 the more than 100 local new jobs generated during the construction and operational
18 phases of the project are likely to occur within the Town of Wilmington. Because
19 Wilmington is the closest town to the proposed wind farm with a choice of quality
20 lodging and restaurant facilities, it is also likely to derive economic benefit from
21 indirect expenditures associated with the project (such as meals, lodging, retail sales,
22 etc.) both during the construction (especially) and operation of the project.

1 In 2006, using data from its Quarterly Census of Employment and Wages
2 (QCEW), the Vermont Department of Labor estimated there were 70 private sector
3 construction industry jobs in Wilmington. During the construction phase of the
4 wind farm, now estimated to occur in 2010, more than 85 new local construction
5 jobs will be created. Although project critics contend that these are “temporary”
6 jobs, almost all construction work is by definition “temporary.” Construction work
7 usually consists of a series of projects, some of which may be very short term (such
8 as maintenance, repair and minor renovation work), and others of which may be
9 longer term (such as large developments, large commercial projects and large public
10 works projects), such as the Deerfield Wind facility. The proposed facility will be
11 one of the largest construction projects in Bennington County during its building
12 phase, and if it had occurred in the past two years, would have represented about
13 10% of all non-building construction (such as roads, highways, bridges, water and
14 sewer plants, power plants, etc.) in the entire State in each year. With construction
15 and real estate markets now entering a severe cyclical downturn expected to depress
16 markets for several years, the construction jobs created by the wind farm will be
17 especially important to local contractors and construction workers.

18 The several direct permanent local jobs created by this project will be
19 relatively high paying, steady jobs, unaffected by cyclical business downturns and
20 weather events that may affect local tourism. The average annual wage, excluding
21 benefits, of the direct local management and maintenance jobs for the wind farm will
22 exceed \$60,000 per year (in current 2008 dollars). This is more than double the
23 average annual wage for all jobs (public and private) in Wilmington, which in 2006

1 was \$25,594.² While it is impossible to know exactly where these workers may
2 reside, Wilmington's proximity to the project and other town attributes (such as high
3 quality housing stock, recreational activities, vibrant village center, etc.) make it a
4 good candidate. Even if there is no direct Town income impact from workers
5 residing in Wilmington, there is likely to be some beneficial indirect impact from
6 expenditures in Wilmington from operations at the wind farm. This could include
7 everything from meals, groceries, guest lodging, hardware, office supplies and other
8 incidentals purchased by employees or guests of the wind farm that are necessary to
9 its operation.

10

11 **Q. According to Mr. Rusten, Ms. Streeter, and Ms. Matthews, the Project will not**
12 **have the economic benefit of reducing utility rates for area residents (Rusten pft at**
13 **12-13; Streeter pft at 9; Matthews pft at 4). How do you respond to this claim?**

14 Response: Depending upon the ultimate purchasers of the power generated by the
15 project and the contract terms, there may or may not be a measurable economic
16 benefit to Wilmington and other area residents through below-market (or below-base
17 case) utility rates. As stated in our analysis (pages 33-34):

18 Although no contracts exist at the present time regarding in-State purchases
19 of the power to be produced by the proposed Deerfield Wind project, negotiations
20 are underway with Green Mountain Power to purchase at least 50% of the facility's
21 output at fixed-rates for an extended period of time. [Deerfield Wind] is interested
22 in securing in-state purchase contracts for all of the power produced at the Deerfield
23 Wind Farm. If this occurs, there

² Source: Vermont Department of Labor, 2006 annual QCEW (ES-202) data. The annual average wage for private sector only jobs in Wilmington Town in 2006 was even lower, at \$24,321.

1 could be significant additional positive economic impacts to the State and
2 region from access to stably-priced electric power, contingent upon specific
3 contract provisions and prices. These impacts were not included in the
4 economic model, and thus represent additional potential benefits from the
5 project to the State of Vermont and any specific region of the State served by
6 such sales agreement(s).
7

8 **Q. Mr. Duncan,³ Ms. Matthews, Mr. Rusten, and Ms. Streeter each argue that**
9 **views of the turbines from Wilmington will impact the enjoyment of the area's**
10 **outdoor activities and natural areas for both residents and visitors, and harm**
11 **Wilmington's heavily tourism-based economy (Duncan pft for Wilmington at 5-6;**
12 **Matthews pft at 4; Rusten pft at 13-15; Streeter pft at 7-9). How do you respond to**
13 **these claims?**

14 Response: There is no credible academic literature or objective empirical data that
15 supports the contention that there has been any aggregate negative impact to local
16 tourism visitation and related expenditures due to nearby wind farms at the town,
17 county or regional levels. The above-referenced testimony relies entirely on
18 subjective conjecture based on opinion and anecdotal information. There has been
19 no credible data presented that supports the contention that the existing Searsburg
20 wind farm has negatively impacted local tourism over the past 11 years and no data
21 that would suggest that the proposed wind farm would have negative impacts on
22 tourism. If anything, the best available data suggest the potential for additional
23 tourism visitation from the proposed wind farm, especially if a visitors' center,

³ This refers to Mr. Duncan's testimony filed on behalf of the Town of Wilmington, not his testimony filed on behalf of Duncan Cable TV.

1 regular tours and other supporting amenities were to be offered at the wind farm
2 site. Our analysis of potential tourism impacts, detailed on pages 30-33 of our
3 economic impact report, is as follows:

4 Potential tourism impacts – both positive and negative - associated with
5 the proposed wind farm were also considered in specifying the economic
6 impact model. Given the substantial tourism industry in Vermont and
7 Bennington County, this is a topic of heightened local importance.
8 Following a thorough literature search of academic and other articles on
9 this topic and the specific characteristics of the local tourism sector, we
10 find no empirical basis for a significant adjustment – positive or negative
11 – to likely tourism visitation or expenditures as a result of the proposed
12 wind farm development in Searsburg and Readsboro.

13 As is the case with property valuations and view preferences, there are
14 conflicting perspectives on whether or not the presence of a wind farm
15 will result in any positive or negative tourism response. As is also the
16 case with property valuation impacts, the analyses performed to date are
17 largely anecdotal and, if scientifically designed (which few are), are survey-
18 based, not outcome-based. While surveys can be valuable indicators of
19 future expectations, opinion and preference, they often do not conform
20 to actual expenditure patterns. There have been no empirical studies that
21 measure regional tourism expenditures before and after a wind farm
22 development, with valid control regions. Without such data it is
23 impossible to assign and quantify a meaningful adjustment metric for
24 tourism expenditures.

25 There is considerable evidence that wind farms in a number of U.S.
26 and international sites have become tourism draws, including the
27 existing Green Mountain Power facility in Searsburg. A report issued
28 by Renewable Energy Vermont states that “[t]he Mt. Snow Haystack
29 Regional Chamber of Commerce reported that of those who made
30 inquiries, about 10% asked for information about the turbines in
31 Searsburg.”⁴ There were approximately 1,000 visitors to the
32 Searsburg wind farm reported in 2005.⁵ Many other wind farm sites

⁴ See *The Economic Benefits of Wind Farm Development in Vermont*, Renewable Energy Vermont report by Douglas Hoffer, available at http://www.revermont.org/windfarm_benefits.pdf

⁵ See Prefiled Direct testimony of John Zimmerman, Deerfield Wind Project, at page 49, January 2007

1 are listed as local “tourist attractions.”⁶ Some sites plan for and
2 encourage tourism, with visitor centers, educational and
3 informational programs, the opportunity to climb wind towers to
4 enjoy the “spectacular views,”⁷ and even “the unique experience of
5 staying overnight [at] an operating wind farm” at one Minnesota
6 facility.⁸
7

8 If there were formal plans to attract visitors to the proposed
9 Deerfield facility, including the development of a visitor center,
10 guided tours, tower viewing platforms and related promotional
11 activities, it is possible the development could represent a measurable
12 tourism enhancement to the area.⁹ Without this, there will be some
13 tourism interest, especially since the towers will be visible from parts
14 of nearby State Highways 8 and 9, but probably not extensive enough
15 to warrant any upward model adjustment.
16

17 It is also worth noting that while tourism is an important part of the
18 regional and Vermont economy, it is not as significant in Searsburg
19 and Readsboro as elsewhere in the State. Neither Searsburg nor
20 Readsboro were listed as towns reporting taxable meals, rooms or
21 alcohol receipts in fiscal years 2000 (FY00) through fiscal year 2007
22 (FY07), nor were six of the eight towns that are contiguous to
23 Searsburg and Readsboro.¹⁰ The two contiguous towns that are

⁶ See, for example, the Green Mountain Wind Farm near Garrett, PA, as listed in the local public library page: <http://www.meyesdalelibrary.com/tgreen.html>; The Fenner Wind Farm in Madison County, NY, featured in the County’s tourism guide at: <http://www.madisonontourism.com/showmem.php?category=Things%20to%20Do>; The Prince Edward Island wind farm in Canada, which boasts a visitor center, restaurant and gift shop; The Tierras Morenas Wind Farm located on pristine Lake Arenal in Costa Rica, which is advertised as an attraction for visitors at lakeside hotels; and the Palm Springs Wind Farm, in Palm Springs, California, a major tourist destination, which draws 6,000-10,000 visitors per year, despite charging \$10-\$25 per visitor.

⁷ As reported at the Swaffham, Norfolk (UK) wind farm, where “over 50,000 tourists have climbed the wind turbine tower.” See: http://yes2wind.com/tourism_debunk.html, December 19, 2005

⁸ The Buffalo Ridge Wind Towers are listed as a tourist attraction in the Hendricks, MN area, and offer overnight stays. For more information, see: http://www.hendricksmn.com/wind_towers.html

⁹ In order to avoid any potential negative wildlife impacts, and in response to Vermont Agency of Natural Resources concerns regarding bear habitat, limitations on tourist visitation at the Searsburg wind farm have been placed on the facility. Similar restrictions would probably need to apply in the case of the proposed facility if tourism visitation was to be promoted.

¹⁰These six towns include Stamford, Woodford, Glastenbury, Somerset and Whitingham. It should be noted that the absence of a listing could mean that either there are no taxable receipts, or that there are fewer than 10 reporting units in the town, thus creating disclosure issues. Readsboro has one listed food service enterprise and one hotel (both part of the Readsboro Inn), Searsburg has none. In either case, the paucity of taxable

1 listed, however, Dover and Wilmington, reported significant meals,
2 rooms and alcohol receipts, indicating a sizeable tourism sector in
3 these two locales.
4

5 These two towns reported taxable FY07 meals, rooms and alcohol
6 receipts totaling nearly \$31 million, about one-third of all Bennington
7 County receipts and nearly 2.5% of the State total. Of these two
8 towns, Dover was considerably larger, reporting about \$22.5 million
9 in taxable receipts, while Wilmington reported about \$8.5 million. Of
10 the 103 reporting Vermont towns in FY07, Dover was the 17th
11 largest, while Wilmington ranked 31st.
12

13 The proposed project will be visible from a number of sites in
14 Wilmington and a few locations in Dover, mainly from the higher
15 southwest-facing elevations, as is the case with the existing Searsburg
16 wind farm.¹¹
17

18 The dominant tourist attraction in the area is the Mt. Snow/Haystack
19 ski area in Dover. Although there are many other recreational
20 attractions in the vicinity, the economic impact of winter sports
21 activities in the region is apparent in the monthly distribution of
22 tourism expenditures, [which show that] nearly 60% of all meals,
23 rooms and alcohol expenditures in Dover and Wilmington occur in
24 the winter period between December and March, nearly double the
25 statewide average [see Chart 8 in the report].
26

27 This tilt towards winter tourism in the region is significant in that, as
28 a class of tourists, skiers are among the most concerned with the
29 effects of global warming and among the most receptive to the
30 benefits of wind power. A recent article from the National
31 Geographic News pointed out that 22 ski resorts in 7 states now use
32 wind power credits to supply 100% of their electricity demands,
33 including high profile resorts such as Vail, Jackson Hole, Aspen,
34 Beaver Creek, Snowmass, Breckenridge, Keystone, Sugarloaf and
35 many smaller resorts such as Mount Sunapee (NH), Wolf Creek
36 (CO), Sugar Bowl Resort (CA), Crested Butte (CO), Heavenly
37 Mountain (NV), Mt. Ashland (OR), and in Vermont, Okemo.¹²

meals, rooms (especially) and alcohol revenues and/or hospitality establishments suggests that potential negative fiscal impacts are relatively minor in such unlisted towns.

¹¹ See viewshed map at Docket No. 7250, Exhibit DFLD-JV/MB-8.

¹²For a complete list and details, see the National Ski Areas Association, at:
http://www.nsaa.org/nsaa/environment/the_greenroom/index.asp?mode=greenroom&topic=T07.

1 Together, these areas purchase 305,074,498 kilo-watt-hours (kWh) of
2 clean electricity and keep about 372,282,234 pounds of carbon
3 dioxide from entering the atmosphere.¹³ Jiminy Peak recently
4 constructed a wind turbine atop its ski area in Massachusetts,
5 providing nearly a third of all the power required to run the resort.

6
7 Nearby Stratton Mountain in Vermont is also among those ski areas
8 now offsetting 100% of its electricity consumption with renewable
9 energy credits.

10
11 Based on the ten year experience associated with tourism impacts
12 from the current wind farm in Searsburg, the preponderance of
13 winter ski-related tourism in the area and the absence of any credible
14 scientific studies that associate negative tourism impacts with the
15 presence of wind turbines, it is likely that any economic impacts on
16 the tourism sector in the region from this project – positive or
17 negative - are likely to be negligible.

18
19 In addition to the wind farms located in tourism-dependent areas mentioned
20 in our analysis above, there are other similar locations cited in other studies of this
21 issue.¹⁴ One such study, with particular local relevance, was performed by Todd
22 Comen, an associate professor of Hospitality and Tourism Management at Johnson
23 State College in Vermont and head of the Institute for Integrated Rural Tourism.
24 See *Exhibit DFLD-TK-04* at 6-35.

25 In addition to reviewing potential economic impacts of several tourist-related
26 wind farm sites worldwide, this study performed original survey work to assess
27 attitudes and perspectives on wind turbines among Vermont tourists, with specific
28 attention to winter tourists and tourist-related businesses in and around the
29 Searsburg wind farm, including many in the Town of Wilmington. Of the

¹³ See: <http://news.nationalgeographic.com/news/2007/01/070109-green-skiing.html>

¹⁴ See, for example, Cape Wind Draft EIS, Section 5.0, page 5-277, *Exhibit DFLD-TK-05*, and Prefiled Direct Testimony of Todd Comen, November 17, 2003, at 6-35, *Exhibit DFLD-TK-04*.

1 Wilmington tourist-dependent businesses surveyed, Mr. Comen found that “all of
2 those interviewed observed no negative impact on their businesses” from the wind
3 farm. Of the tourists interviewed in Wilmington, “100% of the respondents said
4 that the wind farm did not deter them from visiting specific attractions in the area,”
5 and “100% also said that additional wind towers would not deter them from visiting
6 the Southern Vermont region in the future.”¹⁵

7

8 **Q. Ms. Streeter claims that in her experience as a local realtor, approximately**
9 **50% of homebuyers do not want to see the existing turbines, suggesting that**
10 **additional turbines will lead to lowered property values (Streeter pft at 6-7). How do**
11 **you respond to this claim?**

12 Response: Ms. Streeter’s informal collection of anecdotal data and opinion to
13 support her contention that property values will decline due to the presence of wind
14 turbine views is contradicted by the best available empirical data on the subject,
15 Town procedures for assessing the value of properties with views of wind turbines in
16 Wilmington over the past 11 years, and the region’s general experience with property
17 valuation changes since the construction of the Searsburg GMP wind farm in 1996.

18 Per the below analysis from our study of this Project, there is no objective
19 empirical data that supports the contention that there will be negative aggregate
20 property valuation impacts at the town, county or regional levels as a result of the
21 proposed wind farm.

¹⁵ Prefiled Direct testimony of Todd Comen, November 17, 2003, Page 26 of 35, *Exhibit DFLD-TK-04*.

1 The net property tax valuations used as economic model inputs herein
2 considered the issue of potential property valuation declines associated
3 with parcels in close proximity to the proposed wind turbines. After an
4 extensive literature review of the topic, it was determined that there was
5 no empirical basis for any negative town or county adjustment for this
6 effect. Although there is no question that there are individual property
7 owners and potential property buyers who consider the proximity of
8 wind turbines to be undesirable, there is no evidence that these opinions
9 result in measurable negative impacts in aggregate town or county-wide
10 property sales prices and valuations.

11 In fact, there may be some net positive property valuation effects beyond
12 the direct property tax payments from the project. By significantly
13 reducing town-wide property taxes, the demand for properties in the
14 affected area would increase, and hence their valuations would be
15 expected to increase. These additional positive effects, which would
16 probably occur over an extended time period, were not estimated or
17 included in the model inputs used in this analysis.

18 Most extant analyses on the topic of property valuations and proximity to
19 wind farms are based on anecdotal information from affected property
20 owners, local realtors, wind farm proponents or wind farm opponents.
21 Few are scientifically constructed studies with any meaningful statistical
22 significance.

23 The most rigorous, unbiased study on this topic to date is an analysis
24 initially performed at Bard College by Ben Hoen, focusing on
25 property valuation changes associated with the Fenner wind farm in
26 New York State.¹⁶ This study is currently being extended via similarly
27 comprehensive analyses of other wind farm sites by Hoen and Dr.
28 Ryan Wisser, under the auspices of the venerable Lawrence Berkeley
29 National Laboratory.¹⁷

30 The initial Hoen study found that:

31 Our analysis of 280 home sales within 5 miles of the Fenner
32 windfarm, in Madison County, New York failed to uncover
33 any statistically significant relationship between either

¹⁶ *Impacts of Windmill Visibility on Property Values in Madison County, New York*, April 30, 2006, by Ben Hoen, Bard Center for Environmental Policy, Bard College

¹⁷ The Lawrence Berkeley National Laboratory is the one of the best known and oldest of the nation's U.S. Department of Energy National Laboratories. There are currently 10 Nobel Laureates associated with the Laboratory.

1 proximity to or visibility of the windfarm and the sale price of
2 homes. Additionally, the analysis in this report failed to
3 uncover a relationship even when concentrating on homes
4 within a mile or that sold immediately following the
5 announcement and construction of the windfarm.

6 The study concluded that:

7 Contrary to the notion that adverse effects are universal, this
8 report did not produce any significant relationship between
9 distance from, or visibility of the windfarm and the sale prices
10 of homes. These results fit with those reported in other
11 empirical studies that surveyed public attitudes, which found
12 that people living near turbines find them “acceptable” and,
13 in fact, rarely spontaneously mention them (Braunholtz and
14 MORI-Scotland, 2003).

15 Although the expanded study has not been completed as of this date, it is
16 expected to be released in the fall of 2008. In the meantime, Ryan and
17 Hoen have reported preliminary findings based on an ever-increasing
18 sample size of properties sold and wind farm sites analyzed. Based on
19 their analysis of 3,638 property transactions associated with six wind
20 projects to date, they have found no results contrary to the initial study.¹⁸
21 Their preliminary findings include:

22 - There is no statistically significant evidence that views of wind turbines
23 have a measurable impact on property resale values, even among
24 properties in relatively close proximity to wind turbines.

25 - Even homes located very near a wind facility (within one mile and
26 within half a mile), with or without a view of the facility, do not seem to
27 have statistically significant property resale differentials.

28 - Home values were not affected in a statistically measurable way based
29 on the number of miles from a home to the nearest turbine, the number
30 of turbines visible from the home or the viewing angle over which
31 turbines can be seen from the home.

¹⁸ Based on a presentation by Wisner and Hoen, entitled, “The Impact of Wind Facilities on Residential Property Values,” presented at the American Wind Energy Association Conference, November 1-2, 2007, *Exhibit DFLD-TK-03*.

1 Another extensive and particularly relevant study on this topic is an
2 analysis by the Renewable Energy Policy Project (REPP) that included
3 the existing Searsburg wind farm as one of the sites analyzed.¹⁹

4 The REPP report, published in May of 2003, examined more than 3,300
5 individual property transactions in and around the Searsburg wind farm,
6 before and after its construction. As the only commercial wind farm in
7 Vermont, and in the specific rural location of the proposed project, the
8 Searsburg analysis has particular relevance to this project. In all three of
9 the statistical regression models used in this analysis, the authors found
10 that “average sales prices grew faster in the viewshed than in the
11 comparable area” following construction of the wind turbines. The
12 analysis of the Searsburg facility concluded that, “there is no significant
13 evidence that the presence of the wind farms had a negative effect on
14 residential property values.” The same report, which studied eight other
15 U.S. wind farms in comparable detail, found “no evidence that wind
16 development has harmed property values within the view shed.”

17 While actual property transactions data are the only conclusive basis for
18 measuring valuation changes due to the presence of wind farms, the most
19 objective anecdotal information on this topic probably comes from tax
20 assessors. A 2002 analysis employing an extensive survey of tax assessors
21 in 13 U.S. counties, containing 22 recently developed wind farms, found
22 “no evidence indicating that views of wind turbines decreased property
23 values.”²⁰ The study also opined that “[o]ne of the likely reasons that
24 wind turbines do not diminish property values is that not all people agree
25 that views of wind turbines are undesirable. As reported by the tax
26 assessors, some residents find views [of] the wind turbines attractive. If a
27 homeowner dislikes having a view of the wind farm, they may move and
28 sell their house to someone who likes the view. In this case property
29 values would not be diminished.”

30 Based on the above analysis and review, we find no basis for a negative
31 property valuation adjustment to the economic model used herein and
32 believe the model inputs for net property tax changes in Bennington
33 County represent conservative assumptions regarding the economic
34 impact of the proposed development. In addition to using minimum
35 local property tax payments for the proposed wind farm, the demand and

¹⁹ *The Effect of Wind Development on Local Property Values*, by the Renewable Energy Policy Project, May 2003, available at http://www.crest.org/articles/static/1/binaries/wind_online_final.pdf.

²⁰ *Economic Impact of Wind Power in Kittitas County*, by ECONorthwest, November 2002, available at <http://www.catenergy.com/pdf/%20files/Kittitas%20Wind%20final.pdf>.

1 property valuation effects from lower property taxes in Searsburg and
2 Readsboro could provide further economic benefit to the region than
3 presently estimated.

4 Without providing a questionnaire or conducting any formal survey process,
5 Ms. Streeter contends that “approximately fifty percent of existing buyers do not
6 want to see the existing wind turbines,”²¹ and implies that this factor has significantly
7 depressed the values of properties with such views. When asked in discovery how
8 much aggregate Town property values would drop due to the development of the
9 proposed wind farm, she cited a Cape Cod survey of local property owners who
10 were asked to anticipate property valuation changes that might result from
11 construction of an off-shore wind generation facility on Nantucket Sound. This
12 survey was prepared and administered by project opponents.²²

13 Although there may be buyers who hold the opinions reflected by Ms.
14 Streeter, it is impossible for her to draw any meaningful conclusions regarding
15 potential property valuation impacts in Wilmington based on the anecdotal
16 information and survey data she relies upon. Surveys like the Cape Wind survey Ms.
17 Streeter cites that rely on conjecture and opinion, not actual market transactions, are
18 not valid predictors of actual market response, especially when conducted by
19 opponents or supporters of a particular project. In the absence of any other
20 empirical data, they may be of some value if impartially administered. But, as noted
21 above, there are credible empirical analyses that show no aggregate negative property

²¹ Prefiled Testimony of Margaret Streeter, page 6, April 11, 2008

²² Town of Wilmington Responses to Deerfield Wind’s Second Set of Discovery Requests (June 11, 2008) at 6.

1 valuation responses at the town, county or regional levels to the presence of wind
2 turbines.

3 Among the most telling evidence that there is likely to be no significant
4 viewshed impact on property values from the proposed wind farm development is
5 the fact that the Town of Wilmington has no record of which Town properties have
6 views of the existing Searsburg wind turbines and does not adjust the assessed values
7 of properties based on this factor.²³ If turbine views were truly a significant factor
8 affecting property valuations, as Ms. Streeter contends, it would have been noted and
9 measured in the eleven years that the existing Searsburg wind farm has been visible.

10

11 **Q. Mr. Duncan argues that the Project will not add any tax base to Wilmington**
12 **and that because of the Town's method of determining tax rates, the potential**
13 **decline of individual property values may lead to increased taxes for residents**
14 **(Duncan pft for Wilmington at 3-4). How do you respond to this claim?**

15 Response: It is true that the project will not directly add any taxable base to the
16 Wilmington Town Grand List, unlike in Searsburg and Readsboro. Although there
17 may be some indirect tax base growth due to indirect and induced economic impacts
18 that benefit Wilmington, these are likely to be relatively small (i.e., some employment
19 growth from the project that could result in new residents and related real estate
20 investment in Wilmington and some business growth from sales related to project
21 activity that could result in property expansion or improvements).

1 Although there is no valid basis for assuming that aggregate property values
2 will decline in Wilmington due to the presence of the proposed wind farm (per my
3 response to the preceding question), even if they did, the total taxes paid by residents
4 of the Town would not necessarily increase. If all Town property valuations and
5 assessed values were to decline, and Town expenditures remained constant, the tax
6 rate would increase, but the total tax payments would remain the same (i.e., a higher
7 tax rate times a lower assessed property value would equal the same tax payment
8 amount, assuming constant Town expenditure levels). Unless Town expenditures
9 rise, there will be no change in the aggregate Town taxes paid.

10

11 **Q. Mr. DeCesare for the Town of Wilmington makes a number of arguments as**
12 **to why the REPP property value report cited in the direct testimony of Deerfield**
13 **witness John Zimmerman is not reliable. First, he contends that there are too few**
14 **sales of homes near the existing Searsburg project to allow for a regression analysis,**
15 **leading the report’s authors to use data from outside the immediate area to support**
16 **their findings (DeCesare pft at 4-5). How do you respond to this claim?**

17 Response: The contention that there is an insufficient sample size to yield
18 statistically significant results from the simple regressions used in the REPP report is
19 false. The REPP analysis for Searsburg was based on more than 3,300 sales, the
20 second largest sample size of the eleven wind farm sites analyzed in the REPP study
21 and far more (by a factor of at least ten) than is necessary for statistical significance

²³ The Town of Wilmington provided this information in its Responses to Deerfield Wind, LLC’s Second Set

1 in the tests they performed. Mr. DeCesare seems to be confusing his experience
2 using a pre-packaged statistical software program for real estate assessment that
3 appears to rely on multivariate regression techniques (which can require much larger
4 sample sizes for valid results) with the univariate regression tests used in the REPP
5 report.

6 Mr. Decesare also erroneously contends that a large portion of the source
7 data used in the REPP report for the Searsburg wind farm property analysis were
8 from the Montpelier, Vermont area, not the area in and around Wilmington. He
9 mistakenly concludes that the REPP report “supports its findings by data collected
10 from sources not necessarily located in the immediate market area,” and dismisses
11 the report “due to insufficient sales data from the immediate market area,”
12 (DeCesare pft at 3 and 6) because data used for the Searsburg analysis was purchased
13 from Phillip Dodd of The Vermont Property Owners Report, which is based in
14 Montpelier. Mr. Dodd is indeed based in Montpelier, but he is well-known,
15 especially in professional Vermont real estate circles, for collecting and maintaining
16 the most extensive database of real estate transactions in the State. His database
17 covers every town in the State, not just Montpelier, and includes virtually every valid
18 real estate transaction in the State over a period of many years. The data supplied to
19 the REPP report from Dodd were specific to the Searsburg area. There were no
20 transaction data from Montpelier or anywhere else outside of the relevant control

1 region used in the REPP analysis. Mr. DeCesare's basis for dismissing this analysis is
2 unjustified.

3

4 **Q. Mr. DeCesare suggests that the REPP study relies on comparisons to areas**
5 **that are demographically dissimilar to the Wilmington area, which comprises mainly**
6 **vacation homes (DeCesare pft at 6-7). How do you respond to this claim?**

7 Response: The REPP study includes the Searsburg GMP wind farm as one of
8 eleven wind farm sites analyzed. This site is virtually the same as that of the
9 proposed Deerfield Wind farm and could not be more geographically or
10 demographically relevant.

11

12 **Q. Mr. DeCesare also claims that a "direct sales comparison approach" shows**
13 **that "view amenity" is important to a typical buyer, with a greater effect evident on**
14 **higher-priced properties (DeCesare pft at 5-6). How do you respond to this claim?**

15 Response: Mr. DeCesare offers no data to support this claim. The data provided to
16 us by Mr. DeCesare in response to Deerfield Wind's discovery requests, and upon
17 which he has based all his assertions of property valuation impacts, included no
18 indication of wind farm views or notation of any view amenities whatsoever. The
19 data included few recent transactions and no information on building square footage
20 or critical building amenities and site characteristics that affect property valuations.
21 Based on the data he has provided, the assertions he makes regarding property
22 valuation changes are not statistically supported and thus can only be considered
23 opinion. Without valid supporting source data, I cannot agree with the above

1 statement or any other conclusion offered by Mr. DeCesare regarding property
2 valuation impacts associated with the proposed wind farm.

3

4 **Q. Mr. Shea states that the visibility of the Project will harm Route 9, a scenic**
5 **byway, and diminish tourism and business, harming the local economy (Shea pft at**
6 **8). How do you respond to this claim?**

7 Response: The existing Searsburg wind farm is clearly visible from Route 9 and has
8 had no reported harmful impact on the local economy of which I am aware. The
9 proposed Deerfield Wind farm is likely to have similarly neutral or slightly positive
10 economic impacts, as noted in our economic impact report and above testimony.

11 The project's potential aesthetic impacts are discussed further in the testimony and
12 reports prepared by Jean Vissering and Michael Buscher. They conclude that the
13 Project will not have an undue adverse aesthetic impact on the area, including Route
14 9. *See* Prefiled Rebuttal Testimony and Exhibits of Jean Vissering and Michael
15 Buscher.

16

17 **Project Financial Viability**

18 **Q. Mr. Hewson for Save Vermont Ridgelines includes a section in his testimony**
19 **entitled “Project Economic Feasibility”, in which he touches upon a number of**
20 **issues regarding the costs and revenues of the Project, and whether it is “financial**
21 **viable”. Before delving into the specifics, can you comment on the economics of**
22 **wind generating facilities?**

1 Response: Because wind farms have such high up-front capital requirements and
2 low operating costs relative to most other electric generating facilities, the downside
3 risks to the public of poor financial project planning are minimal. This risk is
4 assumed almost entirely by the investors who fund the initial capital expense of
5 construction and permitting. Once a wind farm is built (and this, too, occurs within
6 a relatively short time period, thus limiting the risk of financial insolvency before the
7 project is brought on line), it is very likely to be operated, even if the original owner
8 becomes bankrupt.

9
10 **Q. Mr. Hewson argues that the Project's profitability depends on securing power**
11 **purchase agreements at much greater rates than Green Mountain Power is willing to**
12 **pay as well as on federal tax credits that have not yet been renewed (Hewson pft at**
13 **21-22).²⁴ How do you respond to these claims?**

14 Response: If the project developers are wrong about the assumed price at which
15 they can sell power produced by the facility and/or federal tax credits that may be
16 assumed, the return on their investment will be reduced or eliminated. Once the
17 facility is built, however, it is very likely to be operated, since the generation cost per
18 megawatt of power produced will be well below any reasonable forecast of
19 alternative power sources that require expensive fuel inputs to operate. For example,
20 if operating costs at the Deerfield facility are \$3 million per year, the cost per kilowatt
21 hour would only be about 3 cents, about one-quarter of the existing market price.

²⁴ Citations to the prefiled testimony of Mr. Hewson are to the version filed under seal.

1 Although the investors could lose any return on their initial investment, and principal
2 as well, it is inconceivable that the facility would not be operated once built, even if
3 pricing and other assumptions do not materialize as planned.

4

5 **Q. Mr. Hewson claims that Deerfield’s estimated capital costs for the Project are**
6 **far higher than the capital costs he has seen for other wind projects, and that as a**
7 **result, Deerfield Wind will be at a “significant competitive disadvantage to their**
8 **lower cost wind power competitors” (Hewson pft at 21). How do you respond?**

9 Response: Per the above response, if this is true, the initial project owners will
10 realize a lower return on their investment. However, this would be highly unlikely
11 to affect power output or related macro-economic impacts as projected in our
12 analysis.

13

14 **Q. Mr. Thomas for the Department of Public Service testifies that the creation of**
15 **jobs and property tax revenue, while benefits of the Project, do not constitute major**
16 **benefits that warrant approval of the Project on their own. Rather, Mr. Thomas**
17 **states that to meet the “public good” test under section 248, Deerfield must enter**
18 **into stably priced power contracts with Vermont utilities (Thomas pft at 5-6). How**
19 **do you respond to this claim?**

20 Response: I believe the economic benefits of the project, including more than \$18
21 million in State and local tax revenues over the initial 20 year life of the facility, as
22 detailed in our analysis, are significant and positive. Favorable contractual terms for
23 the sale of the power produced at the facility that specifically benefit Vermont

1 consumers would enhance the “public good” still further, but it should be noted that
2 “stably priced power contracts” are not necessarily always considered “good.” Stably
3 priced contracts are good as long as the market price is above the stable contract
4 price. If or when market prices fall below the stable price, the rigidity in these
5 contracts will become a liability.

6

7 **Q. Mr. Thomas testifies concerning the benefits of stably-priced power**
8 **contracts (Thomas pft at 6-9). How do you respond?**

9 Response: Per the above response, stably priced power contracts are not necessarily
10 preferable, unless there is an assumption that price volatility will be significant
11 and/or that future prices will rise. Ideally, power contracts would be both relatively
12 inexpensive (compared to past or market prices) and remain so indefinitely. If power
13 prices drop, as has happened in the past, stably priced contracts could represent both
14 a political and economic burden.

15

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

17 Response. Yes, it does.