

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Docket No. _____

Petition of UPC Vermont Wind, LLC for a Certificate of)
Public Good pursuant to 30 V.S.A. section 248,)
authorizing it to construct up to a 52 MW wind electric)
generation facility, and associated transmission and)
interconnection facilities, in Sheffield and Sutton, Vermont,)
and operate the same.)

**PREFILED DIRECT TESTIMONY OF
AVRAM PATT**

ON BEHALF OF UPC VERMONT WIND, LLC

February 21, 2006

Summary:

Mr. Patt describes the agreement between UPC and WEC concerning the purchase of power from the proposed Sheffield Wind Farm, explains how this agreement and the Sheffield project are in the interests of WEC's members and ratepayers, and explains how the purchase of power from the Sheffield project is consistent with WEC's IRP.

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

2 Response. My name is Avram Patt. I am General Manager of Washington Electric
3 Cooperative, P.O. Box 8, East Montpelier, VT 05651.
4

5 **Q. Please describe your background and experience.**

6 Response. I have been General Manager at WEC since January 1997. As General
7 Manager, I oversee all aspects of WEC's operations and planning. These include our
8 distribution system, our current generating facility, power supply planning and
9 procurement, regulatory matters, relationships with other utilities and participants in
10 the energy industry, budget and finance, personnel, public policy, and member
11 relations. I am responsible for carrying out WEC's objectives as determined by our
12 Board of Directors. Prior to becoming General Manager, I served on WEC's Board
13 of Directors for approximately eight years. I served as Director of the Vermont
14 Office of Economic Opportunity and held other public management and planning
15 positions in State government and non-profit organizations prior to 1997.
16

17 **Q. Have you previously testified before the Public Service Board?**

18 Response. I have presented testimony on behalf of WEC in a variety of proceedings
19 before the Board, including but not limited to recent dockets relating to WEC's
20 efforts to obtain permits and approval for the construction of a landfill gas
21 generation facility located in Coventry, Vermont. I also previously testified and/or
22 represented the Vermont Office of Economic Opportunity and other divisions of

1 the Vermont Agency of Human Services in formal and informal proceedings before
2 the Board.

3

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

5 Response. To describe the agreement between UPC and WEC concerning the
6 purchase of power from the proposed Sheffield Wind Farm, explain how this
7 agreement and the Sheffield project are in the interests of WEC's members and
8 ratepayers, and to explain how the purchase of power from the Sheffield project is
9 consistent with WEC's IRP.

10

11 **Q. Please explain the agreement between UPC Vermont Wind and WEC.**

12 Response. WEC entered into an Advanced Purchase Fee Agreement with UPC on
13 or about May 5, 2005, for an option to purchase power from the development of a
14 wind generation facility in Sheffield, Vermont (hereinafter "UPC Agreement"). The
15 agreement presents two options. The first option, which WEC has already exercised,
16 arose after the applicable P.S.B. Rule 5.200 notice period expired. This option
17 permits WEC to purchase 2 MW of capacity out of the project's total nameplate
18 capacity, along with the applicable Renewable Energy Certificates, for a term of
19 twenty years. In addition, WEC has the option to purchase an additional 2 MW of
20 power upon UPC obtaining a certificate of public good pursuant to 30 V.S.A. § 248
21 at the average contract rate as defined in the UPC agreement. In consideration of
22 these options, WEC utilized grant monies received by the United States Department

1 of Energy towards pre-construction research and planning costs related to
2 environmental, siting and regulatory issues for potential wind project sites.

3 Given the 52 MW Sheffield Wind Farm's expected average capacity factor of
4 32.4% (see the prefiled direct testimony of Dave Cowan and Scott Rowland), 2 MW
5 of capacity would translate to WEC receiving approximately 5676 MWh (or
6 5,676,000 KWh) annually in energy production from the Sheffield Wind Farm, or a
7 total of approximately 11,352 MWh (or 11,352,000 KWh) annually if it exercises the
8 second option. In the context of WEC's energy needs, its total annual energy
9 consumption is approximately 79,000 MWh (or 79,000,000 KWh). The average
10 annual residential consumption is approximately. 6,240 KWh.

11

12 **Q. What factors led to WEC's interest in the UPC Agreement?**

13 Response. Several factors led to WEC's interest in the UPC Agreement. The first
14 factor is the long-standing general policy, as expressed by the Co-op's management
15 and WEC's democratically-elected board, favoring environmentally friendly and
16 socially responsible energy policies and practices. Although WEC had expressed
17 such policies in public forums and implemented them by aggressively promoting its
18 energy efficiency programs, WEC's power supply portfolio was not something that
19 could be dramatically changed except at such times when significant supply contracts
20 were expected to end.

21 The second factor was the dramatic change in WEC's power supply
22 portfolio, and the expiration of the Vermont Yankee (VY) nuclear contract
23 representing about a third of our energy supply. Knowing the VY contract would

1 be ending in 2002 (and other less significant source attrition loomed), WEC began
2 planning for its replacement.

3 Third, in addition to a general preference for renewables and the need to
4 replace the Vermont Yankee and other supply contracts, WEC was strongly
5 motivated by the need to find new power supplies that were affordable, given WEC's
6 high rates. There was a very strong desire to limit or postpone the need for future
7 rate increases. During this time, WEC had also become increasingly concerned
8 about changes to the wholesale power supply market being driven by deregulation
9 and other factors, which were causing great volatility and unpredictability in power
10 costs. In addition to cost, WEC became increasingly interested in avoiding the risks
11 from volatility caused by short term supply and price unpredictability.

12 Finally, WEC's least cost integrated resource plan ("IRP"), which was
13 approved by the Board in June 2005, anticipates that WEC's energy supply portfolio
14 will include at least 1.5 MW of wind power. See In Re Investigation Into
15 Washington Electric Cooperative, Inc.'s Integrated Resource Plan, Docket No. 6896.

16 Accordingly, in 2005, when WEC was presented with the opportunity to
17 obtain an option to purchase up to 4 MW capacity of wind power, which comprises
18 a significant portion of WEC's energy needs, for twenty years, at levels substantially
19 below prevailing market rates by leveraging its grant monies to assist in the research
20 and other preconstruction activities for this project, we believed this was an
21 important opportunity for our members.¹

¹ WEC's anticipated base load for 2007 and going forward is approximately 12-15 MW.

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Q. Does this option to purchase wind power fit within WEC's Least Cost Integrated Plan?

Response. Yes. In 2000 and 2001, WEC and its power supply consultant, La Capra Associates, were actively engaged in analyzing our future power supply options, with the end of the Vermont Yankee contract in November 2002 being the most significant and immediate. (Due to agreements reached in late 2001 related to the sale of Vermont Yankee, WEC's power supply agreement actually terminated earlier in 2002.)

This preliminary analysis, in 2000-01, indicated that under certain circumstances, WEC could meet a significant portion of its future power supply from renewable sources. The analysis showed that WEC's access to economical financing through the Rural Utilities Service (RUS), or grant funding if available, could bring the cost of renewable sources in line with or in some scenarios below the cost of other market options available at that time. Of course, since 2001-2002, power supply market prices have risen by 100% or more, potentially making renewable sources far more competitive than they were even a short time ago. In addition, the analysis found that following such a strategy would result in a far greater degree of cost predictability and stability than other market options. Therefore, a central assumption of WEC's IRP is the inclusion of at least 1.5 MW of wind power in its baseload supply of power. *Exhibit UPC-AP-1* contains excerpts from WEC's approved IRP.

1 **Q. Why are the UPC Agreement and the development of the Sheffield Wind**
2 **Farm of interest to WEC ratepayers?**

3 Response. The UPC Agreement and the Sheffield Wind Farm are of interest to
4 WEC ratepayers because they provide an option to purchase clean, renewable power,
5 which will make a significant contribution to WEC's supply portfolio, at below-
6 market prices, for an extended period of time.

7
8 **Q. Will WEC's purchase of power from this project require Public Service Board**
9 **approval?**

10 Response. No. Notice of the Advance Purchase Fee Agreement was provided to
11 the Board pursuant to P.S.B. Rule 5.200. WEC will comply with the respective rule
12 regarding any future power purchase agreements. However, WEC does not need a
13 certificate of public good pursuant to 30 V.S.A. § 248 because the purchase of
14 electric capacity contemplated by the Advance Purchase Fee Agreement involves an
15 in-state facility, and such a purchase is excluded from section 248 jurisdiction.

16

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

18 Response. Yes it does.