

October 12, 2010

Frederick W. Todd, Project Planner Maine Land Use Regulation Commission 22 State House Station Augusta, Maine 04333

Subject: Rebuttal Comments for Proposed Rule 2010-P211 Petition to Add Portions of Kossuth Township to the Expedited Permitting Area for Wind Energy Development

Dear Fred:

On behalf of Champlain Wind, LLC, enclosed is information provided in response to public comment on the Petition to Add Portions of Kossuth Township to the Expedited Permitting Area for Wind Energy Development. We greatly appreciate the time spent by the Commission and staff in evaluating the Petition and the public input provided during and after the public hearing, and we appreciate the opportunity to provide this response.

Best regards, STANTEC CONSULTING Nes \square

Joy Presott Project Manager

cc: Neil Kiely, Champlain Wind, LLC

Champlain Wind, LLC Rebuttal Comments for Proposed Rule 2010-P211 Petition to Add Portions of Kossuth Township to the Expedited Permitting Area for Wind Energy Development

The following information is being provided in response to public comment on the Petition to Add Portions of Kossuth Township to the Expedited Permitting Area for Wind Energy Development (the "Petition"). We greatly appreciate the time spent by the Commission and staff in evaluating the Petition and the public input provided during and after the public hearing. While this is not a comprehensive response to all of the public comments, we felt it was important to respond to certain broad themes and selected specific issues relevant to the statutory criteria set forth in 35-A M.R.S.A. § 3453 and the Commission guidance on application of these statutory standards. Our response is organized according to the three statutory criteria.

A. Logical Geographic Extension

As illustrated in the maps provided during the public hearing, the Petition area is part of a series of ridges beginning in Carroll Plantation, continuing along the portion of the project area within Carroll Plantation, and extending into Kossuth Township. Attached as Exhibit A is a map that provides a clear visual demonstration that this first requirement is satisfied. See also Petition at p. 5. We also refer the Commission to the consolidated comments of Maine Audubon Society, the Natural Resources Council of Maine, and the Appalachian Mountain Club (collectively the "Environmental Organizations' Comments") at p. 2, and the comments of Roger Milliken, Jr. at p. 2.

During the hearing it was suggested that the Petition area was intentionally excluded from the expedited permitting area due to its proximity (approximately 2 miles) to Pleasant Lake, which is a Great Pond with outstanding scenic value as determined by the Maine Wildlands Lake Assessment. As depicted on Exhibit B, there are 23 lakes ranked as having outstanding scenic value located entirely or partially within the expedited permitting area within LURC jurisdiction, and an additional 12 such lakes located within 2 miles of the expedited permitting area within LURC jurisdiction. Also, as reflected in the map presented during the hearing and attached as Exhibit C hereto, the Sunrise Conservation Easement extends into the southern portion of Kossuth Township, and that conservation area was intentionally omitted from the expedited permitting area. See, e.g., Environmental Organizations' Comments at p. 2. The Petition area does not include any portion of the Sunrise Conservation Easement Area, and Route 6 is a logical landmark to use to ensure that the conservation lands that extended into Kossuth Township were excluded from the expedited permitting area. Although it was suggested during the hearing that the inclusion of Talmadge, which includes portions of the Sunrise Conservation Easement Area, is evidence that there was not an intent to exclude the Sunrise Conservation Easement Area from the expedited permitting area, Talmadge is an organized town and the entirety of Maine's organized areas were included in the expedited permitting area. 35-A M.R.S.A. § 3451(3).

B. Important to Meeting the State's Goals for Wind Energy Development

As set forth in the Petition, the proposed project, which consistent with the Commission's guidance is located predominantly in the existing expedited area for wind permitting, would include approximately 57 MW of installed capacity. Petition at p. 3. As reflected in the Comments filed by the Maine Public Utilities Commission ("PUC"), this amount of installed capacity is important for meeting the State's goals for wind energy development. PUC Comments at 2. This conclusion is echoed in the comments filed by the Conservation Law Foundation, in which it is noted that mid-sized, low elevation projects such as this one are "critical" if Maine is to reach its statutory goals of 2,000 MW by 2015 and 3,000 MW by 2020. CLF Comments at 2. Updated information presented to the Commission on the amount of wind power currently operating, under construction, and in the permitting or development stage, is attached as Exhibit D.

There was a question raised regarding the PUC's assumption that a 57 MW project could be expected to generate 150,000 MWhours of electricity a year. This assumption is in line with the operating data from the Stetson project, which is located approximately eight miles from the proposed Bowers site. Specifically, and as reported to the Commission, for the approximate 11 month period beginning January 23, 2009 (when it began commercial operation) continuing through December 31, 2009, the Stetson project generated 138,969 MWhours of electricity. This period includes the initial start-up and an approximate two-week period in December 2009 when the facility was taken off-line to facilitate the construction of First Wind's Stetson II project.

There was also a question regarding the viability of the wind resource and therefore attached as Exhibit E is additional information regarding the wind resource at the Bowers site. First Wind has successfully developed and is currently operating seven wind projects in the United States, including three projects in the State of Maine. Key to that success has been ensuring that the site hosts a viable wind resource. As reflected in Exhibit E, the wind data collected to date indicates that the project site hosts a mean average wind speed of approximately 7.5 m/sec., which makes this a commercially viable wind resource¹.

¹ The Partnership for Preservation of the Downeast Lakes Watershed included a map showing the 50 m Wind Power Classifications. This map has been replaced with an 80 m Wind Resource Map which represents the first comprehensive update of the wind energy potential by state since 1993 and was developed from a collaborative project between the National Renewable Energy Laboratory and AWS Truewind. The newly revised map shows the predicted mean annual wind speeds at 80-m height. The map and associated information and methodology are available at: <u>http://www.windpoweringamerica.gov/</u> <u>wind_resource_maps.asp?stateab=me</u>. The limitation of statewide wind maps, however, is that wind speeds are calculated and averaged over large regions that do not take into account more granular topographical details. In recognition of this limitation, the wind map provides the following qualification: "Note: Wind resource at a micro level can vary significantly; therefore, you should get a professional evaluation of your specific area of interest."Champlain's evaluation of the wind resource is based on the site-specific information described above. Additionally, in their written comments, the PPDLW erroneously state that Kurt Adams, Josh D'Agnato, and Matt Kearns, all of whom currently work for First Wind, were members of the Governor's Task Force on Wind Power Development. In fact, none of them were members of the Task Force. <u>See</u> attachment B to the report of the Governor's Task Force on Wind Power Development listing members <u>http://www.maine.gov/doc/mfs/windpower/ report.shtml</u>. This is one of several misstatements by PPDLW.

C. The Principal Values and Goals in the Comprehensive Land Use Plan

It is undisputed that there are no lakes, rivers, streams or ponds, no mapped wetland areas, no significant wildlife habitat, no rare or significant plants or natural areas communities, and no scenic or identified recreational resources within the Petition area. For example, as noted in the Environmental Organizations' Comments, the Petition area does not include any rare natural communities or at risk wildlife. Environmental Organizations' Comments at p. 2. This conclusion is supported by the detailed survey work conducted by Champlain, as well as the agency review comments. Accordingly, and as concluded by the Environmental Organizations, adding the Petition area to the expedited permitting area will not adversely impact existing uses and resources within the Petition area and would not compromise any of the CLUP's principal values, goals or policies related to natural character or the protection of ecological resources. Environmental Organizations' Comments at p. 2. Moreover, as reflected in the public comments from the two host landowners, the area is currently used for commercial timber harvesting and the project will facilitate continued use of the area as a working forest and, in doing so, advances the CLUP's principal value of "the economic value of the jurisdiction derived from the working forests," CLUP at 2. Specifically, Roger Milliken, Jr. testified that the project is not only consistent with but will facilitate Baskahegan Company's sustainable forestry practices. Lakeville Shores similarly testified to the positive benefits associated with wind power in this location and its compatibility with commercial timber harvesting.

The principal objection to the Petition is based on concerns about the visibility of wind turbines on the recreational and scenic resources beyond the Petition area. As reflected in the Commission's guidance, however, a detailed scenic review and the impact of the project on surrounding recreational uses is more appropriately conducted at the development permit application stage. Indeed, as part of any development application, Champlain will include a visual impact assessment that will identify the scenic resources in the area, characterize the existing uses of those resources, describe and provide visual simulations depicting the scope and scale of the project visibility on scenic resources. See generally 35-A M.R.S.A. § 3452(3) (evaluation criteria for visual impact standard). Thus, as part of its review of any development application, the Commission will have the benefit of specific and complete information from which to draw conclusions regarding the impact of the project on scenic and recreational values.

Because a comprehensive analysis of the impact of visibility of turbines on scenic and recreational resources will be included in any development application, Champlain will limit its response here to issues that are specific to the change in regulatory standards that would result if the Commission were to include the Petition area in the expedited area for wind permitting.

First, several members of the public raised concerns about visibility of development in the petition area on scenic resources located up to 18 miles away, including concerns about impacts to the night sky. Attached as Exhibit F is information provided by LandWorks, the visual consultant for the Bowers project, which discusses the effects of distance on views of turbines and, in particular, the reduced visibility that occurs at distances beyond six miles. Exhibit F also responds to concerns about impacts to the night sky, and the photo montage and line of sight diagrams that were presented by the PPDLW. It is important to note that the scenic

resources and recreational activities of most concern to those who spoke against the Petition exist both within eight miles of the proposed project area as well as beyond eight miles. As part of any development application, the Commission will review the impacts of the project on the scenic resources of state or national significance located within an eight mile study area. Those resources were identified in the power point presentation, and include several lakes that were discussed by members of the public. Although we appreciate that resources in the region, including both those within and beyond eight miles, have distinct scenic and other attributes, the impact of visibility will be more significant on those resources within the 8-mile study area. Impacts beyond the 8-mile radius of statutory focus will be less significant, due to the fact that visibility and the significance of visibility diminish over distance.

Second, the Commission previously expressed interest in understanding whether there are local scenic resources that are not defined as resources of state or national significance and therefore would not be reviewed in connection with an application for an expedited wind energy development. At the public hearing, we provided a list of such locations, and attached as Section 4 of Exhibit F is an updated list that includes Trout Lake (which would not have any visibility of turbines) and key considerations related to visibility of turbines on those resources.

Finally, for the majority of scenic resources in the region, the visual impact of turbines in the Petition area will be incremental to visibility of turbines from the existing expedited permitting area. Thus, as reflected in the Environmental Organizations' Comments, the scenic impact of development within the Petition area is "likely to be marginally additive to, rather than qualitatively different from, development within the adjacent expedited area." Environmental Organizations' Comments at 3.

In summary, the Commission must necessarily balance the principal values and often times competing goals reflected in the CLUP. The unifying vision for the jurisdiction, however, is that it will retain its unique principal values and will exemplify a sustainable pattern of land uses. CLUP at 1.1 p. 1. As noted in the CLUP, "a sustainable pattern of land uses is essential to achieving the Commission's vision for the future," id. at 1.1 p. 2, and wind power is a land use that is expressly recognized as an important goal. CLUP at 13 (identifying goals related to energy resources). The Task Force and Legislature unanimously concluded that development of wind power in Carroll Plantation and portions of Kossuth Township was compatible with existing patterns of development and resource values when considered from a landscape level and specifically encouraged development of wind power in that location. 35-A M.R.S.A. § 3403(2). Adding this area to the expedited wind permitting area will facilitate development of a wind energy project that will advance the CLUP's and the State's wind energy goals, and will do so in an area specifically determined to be appropriate for wind development. Moreover, doing so is consistent with each of the three statutory criteria and the Commission's implementing guidance, and will allow Champlain to submit a single application to the Commission for comprehensive review of a project that is located predominantly in the existing expedited permitting area.

Thank you for consideration of this additional information.



Exhibit A: Map of Elevations in Project Area in Carroll Plantation and Proposed Addition in Kossuth Township

Exhibit B: Lakes with Outstanding Scenic Value Within the Proximity of LURC Expedited Permitting Area				
Lakes with Outstanding Scenic Value Fully or Partially within LURC Expedited Permitting Area				
Lake	Township	County		
Bald Mountain Pond	Bald Mtn TWP T2R3	Somerset		
Davis Pond	T05 R07 WELS	Penobscot		
Donnell Pond	T09 SD	Hancock		
Elbow Lake	T03 Indian Purchase	Penobscot		
Fox Pond	T10 SD	Hancock		
Jackson Pond	Concord Twp	Somerset		
Jim Pond	Jim Pond Twp	Franklin		
Little Long Pond	T10 SD	Hancock		
Long Pond	Long Pond Twp	Somerset		
Moosehead Lake	Little Squaw Twp	Piscataquis		
Mosquito Pond	The Forks Plt	Somerset		
Moxie Pond	East Moxie Twp	Somerset		
North Twin Lake	T4 Indian Purchase	Penobscot		
Pemadumcook Lake	T01 R09 WELS	Piscataquis		
Penobscot Lake	Dole Brook Twp	Somerset		
Pleasant and Mud Lakes	T06 R06 WELS	Penobscot		
Punchbowl Pond	Blanchard Plt	Piscataquis		
Rangeley Lake	Rangeley Plt	Franklin		
Richardson Pond	Adamstown Twp	Oxford		
Seboeis	T04 R09 NWP	Piscataquis		
South Twin Lake	T4 Indian Purchase	Penobscot		
Spring River Lake	T10 SD	Hancock		
Tunk Lake	T10 SD	Hancock		
Lakes with Outstanding Scenic Value Within 2 Miles of LURC Expedited Permitting Area				
Lake	Township	County		
Beaver Pond	Magalloway Plt	Oxford		
Chain of Ponds	Chain of Ponds Twp	Franklin		
Cupsuptic Lake	Adamstown Twp	Oxford		
Holeb Pond	Holeb Twp	Somerset		
Jerry Pond	T05 R07 WELS	Penobscot		
Kennebago Lake	Davis Twp	Franklin		
Ordway Pond	Shirley	Piscataquis		
Pierce Pond	Pierce Pond Twp	Somerset		
Pleasant Lake	T06 R01 NBPP	Washington		
Sturtevant Pond	Magalloway Plt	Oxford		
Upper Richardson Lake	Richardsontown Twp	Oxford		
Virginia Lake	Stoneham	Oxford		



Exhibit C: Map of Sunrise Conservation Easement in Vicinity of Proposed Addition

Exhibit D: Memo regarding Power Production Report and Windpower Turbine/MW Build Out Analysis



JOHN ELIAS BALDACCI GOVERNOR STATE OF MAINE DEPARTMENT OF CONSERVATION MAINE LAND USE REGULATION COMMISSION 22 STATE HOUSE STATION AUGUSTA, MAINE 04333-0022 www.maine.gov/doc/lurc

ELIZA TOWNSEND COMMISSIONER

TO:Commission MembersFROM:Marcia Spencer Famous, Senior PlannerDATE:September 27, 2010SUBJECT:Wind energy development in LURC jurisdiction

You have recently inquired about the potential build-out of wind energy development in Maine, in particular in LURC jurisdiction. Several groups have been evaluating this topic from a variety of perspectives, but many factors affect how the wind energy build-out in Maine will occur and assessments vary. However, information about the current status of wind energy development in Maine is readily available. That information, along with possible build-out scenarios and actual production in megawatt hours (MWh) for two LURC permitted projects, are presented here.

In part, the interest in Maine's development of wind energy facilities is because this state has a greater on-shore wind resource than the other New England states. Of the 9,426 megawatt (MW) total on-shore wind resource potential in New England, Maine has 4,564 MW, or 48%, followed by Vermont, New Hampshire, Massachusetts, and Connecticut, in that order (this data is from the study summarized in Section 3, below). A few of the groups currently tracking or assessing wind energy development in Maine include Maine's Office of Energy Independence and Security (OEIS), the Natural Resources Council of Maine (NRCM), the Independent System Operators of New England (ISO-NE), and the Maine Renewable Energy Association (MREA).

1. **State wind energy goals.** Building on the recommendations of the Governor's Task Force on Wind Energy Development in 2007/08, the Wind Energy Act (PL 2007, Ch. 661) (*see* 35-A M.R.S., § 3404, sub-§ 2) states:

"State wind energy generation goals. The goals for wind energy development in the State are that there be:

A. At least 2,000 megawatts of installed capacity by 2015; and

B. At least 3,000 megawatts of installed capacity by 2020, of which there is a potential to produce 300 megawatts from generation facilities located in coastal waters, as defined by Title 12, section 6001, subsection 6, or in proximate federal waters."

Since the Wind Energy Act was passed in April of 2008, the State has also adopted the additional goal for deepwater ocean wind energy development of 5,000 MW (*see* 35-A M.R.S.A. §3404, sub-§2 (PL 2009, Ch. 615) (LD 1810)). However, that additional amount of wind energy development is dependent on technology still in the development stages and is realistically expected to be 10 years in the future (NRCM, personal communication).

Wind energy build-out memo Page 2 of 7

2. Existing and proposed wind energy development and progress toward achieving State goals. The Wind Energy Act requires OEIS to track the State's progress toward reaching its goals and annually report to Legislature on the amount of wind energy being generated in the state or currently under development. As of January 2010, OEIS reported the following:

A. Progress toward state goals.

- "The State of Maine has met 8.7% of wind power goals with 174 MW of installed capacity. (Based on the 2015 goal.)"
- "The percentage would rise to 13.28% if all 91.5 MW of capacity under construction are operational."
- "The percentage would rise to 19.02% if all 115 MW permitted are constructed and operational."
- "The percentage would rise to 45.04 % if all 520.3 MW in development are constructed and operational."

"At the current rate, Maine will need to bring online 183 MW of capacity a year, starting in 2010 to meet the state's wind power development goals by the end of 2015."

- B. "Summary of Operational, Under Construction, Permitted and Under Development Wind Projects in Maine.
 - Total "Operational" Wind Power Projects: 174 MW
 - Total "Under Construction" Wind Power Projects: 91.5 MW
 - Total "Permitted" Wind Project Developments: 115 MW
 - Total "Under Development" Wind Project Developments: 520.3 MW"

See the attached table and map for a compilation prepared by LURC staff of the existing and proposed wind energy development in Maine at this time¹.

- 3. **Governor's Task Force on Wind Energy Development.** A 2007/08 study conducted for the Governor's Task Force on Wind Power Development ("*Sustainable Energy Advantage Wind Analysis*") was contracted by NRCM, which was represented on the Task Force. The study evaluated the amount of wind energy (and other renewables) that would need to be developed in Maine and the other New England states by 2015 and 2020 to meet the State/regional commitments, concluding that, taking known factors affecting such development into consideration, the total amount of on-shore wind energy development possible in Maine ranged from 4,000 MW to 10,000 MW² (*see* "References" at end of this memo).
 - A. Based on areas with a wind resource generally considered as economically viable, the study estimated 5,320 MW of energy was possible from on-shore wind development. Including areas with a lesser wind speed not yet considered to be economically viable,

¹ The total MWs listed on the table do not match the totals stated by OEIS in its January 2010 report because of how the projects are "counted", and because of the variable status of this type of development especially in the planning stage.

² "Presentations" - Bob Grace, "Development of a wind power resource deployment framework for Maine & New England" (<u>pdf</u> 2.3 MB) (see References, listed below)

the additional amount possible over the next decade increases by 9,325 MW (but with the caveat that number of turbines required in such areas increases by 50%), for a total of 14,645 MW possible from on-shore wind projects.

- B. The study also estimated that off-shore wind in shallow areas out to 20 miles could potentially generate another 1,200 MW³.
- C. The study included an economic need/demand analysis, as well as the following assumptions to assess the on-shore wind energy development potential:
 - Turbine height 80 meters
 - Excluded areas not likely to be developed state parks, very steep slopes, lakes, wildlife refuges, airports.
 - Excluded 100% of land within 2 miles of the Appalachian Trail, 85% of National Forest Land, 50% of forest land, and 0% of agricultural land.
- D. The study estimated 659,957 acres of land to be available in Maine for on-shore wind energy development, based on a wind resource currently considered to be economically viable. Adding in the lower wind resource, the land area increases to 1,480,000 acres.
- E. The Governor's Task Force recommendations, which were informed by this study, helped form the Wind Energy Act that established the expedited permitting area for wind energy development.
- 4. NRCM has continued to assess the potential build-out of wind energy development in Maine⁴, and has since estimated that:
 - Approximately 45% of Maine's total wind resource is in the expedited permitting area.
 - One-third of LURC's jurisdiction is in the expedited permitting area (3,313,011 acres), of which 17.9% (269,507 acres) has the potential to be developed for wind power.
 - DEP's jurisdiction has 30.3% of the area of Maine potentially developable for wind power, while LURC's jurisdiction has 69%.
 - Approximately 25% of the areas in LURC's jurisdiction that could be developed for wind power are in the expedited permitting area.
 - There is the potential for 6,590 MW in the state's expedited permitting area, with 2,546 MW (39%) of that amount being in LURC's jurisdiction.
 - Based on five existing projects in Maine, including each project's generator lead line corridor, the average amount of land area cleared (includes temporary and permanent) for a wind energy development is approximately 5.3 acres per MW.
 - The amount of clearing (includes temporary and permanent) needed for one turbine and the associated road is approximately 3 acres or less (from MREA website, see References below).

³ This is not the same as the estimate for off-shore ocean energy development in deepwater areas.

⁴ NRCM has included in its assessment both areas with a wind resource typically considered to be economically viable as well as the areas with the lesser wind resource.

NRCM recently advised staff that, based on the information provided by the *Sustainable Energy Advantage* study, the number of turbines needed to meet State goals could potentially be as shown in the following tables:

	<u>2015</u>		
	Goal:	2000	MW
		MW of '	Furbines
		3	1.5
Percent	33%	220	440
of	50%	333	667
projects			
in			
LURC	66%	440	880
	<u>2020</u>		
		2000	
	<u>Goal:</u>	3000	MW
	<u>Goal:</u>	3000 MW of '	MW Furbines
[<u>Goal:</u>	3000 <u>MW of 7</u> 3	MW Furbines 1.5
Percent	<u>Goal:</u> 33%	3000 MW of 7 3 330	MW Furbines 1.5 660
Percent of	<u>Goal:</u> 33% 50%	3000 MW of 7 3 330 500	MW Furbines 1.5 660 1,000
Percent of projects	<u>Goal:</u> 33% 50%	3000 MW of 7 3 330 500	MW Furbines 1.5 660 1,000
Percent of projects in	<u>Goal:</u> 33% 50%	3000 MW of 7 3 330 500	MW Furbines 1.5 660 1,000

- 5. **Energy produced by LURC wind projects**. LURC permits for grid-scale wind energy developments, specifically First Wind's Stetson I and II projects, and TransCanada's Kibby I project, include a permit condition requiring the submittal annually for the first two years of operation a report of the amount of energy produced.
 - A. Stetson I (57 MW). In February of 2010, First Wind submitted its first annual report for Stetson I, which became commercially operational on January 23, 2009. The LURC permit for Stetson I includes a condition that states: "The permittee shall submit to the Commission annually for the first two years of operation a report detailing the project's contribution to the State's environmental and energy policy objectives. The report must include total megawatt hours generated and an estimate of avoided pollution by project operation." As of December 31, 2009, during an approximately 11 month period in 2009, Stetson I produced 138,969 MWh of energy. In Zoning Petition ZP 713, First Wind had estimated that it would produce 164,776 MWh annually. Roughly estimating 12 months of production from the 11 month amount reported, the annual production by this facility would be 151,602 MWh annually⁵.

⁵ Annual amount calculated by LURC staff.

- B. Stetson II (25.5 MW). Stetson II became commercially operational in April of 2010, making the first annual report due in the spring of 2011. The permit condition for Stetson I was expanded upon for Stetson II, stating: "The permittee shall submit to the Commission annually for the first two years of operation on the project's contribution to the State's economic, environmental and energy policies, including but not limited to, the total megawatt hours of generation during the year, calculation of avoided emissions resulting from operation of the project, companies used during construction, the number of Maine residents hired, total dollars spent in Maine, the progress of any TIF program established, and the amount of property taxes paid to the State."
- C. *Kibby I.* On October 30, 2009, Phase I (Series A; 66 MW) of TransCanada's Kibby I project became commercially operational. Series B is expected to become operational by the end of 2010. The condition of the LURC permit for that project states: "The permittees shall submit to the Commission annually for the first two years of operation a report detailing the project's contribution to the State's environmental and energy policy objectives. At a minimum, the report must include total megawatt hours generated and an estimate of pollution reduced or displaced by project operation." In discussion with staff, TransCanada has agreed to submit its first annual report after the first year of partial energy production, which would be the end of 2010.

At the May 12, 2010 public hearing for Kibby II, TransCanada testified that the 132 MW Kibby I project was initially estimated to produce 356,000 MWh, with a capacity factor of 30.6%. TransCanada also testified that, including the time the facility was off-line due to collector line issues, Series A had been running at 29.2% capacity. TransCanada further testified that during start-up operations, occasional shut-downs are normal; and that the collector line issues that were encountered have been resolved. TransCanada recently reported to staff monthly production data for January 2010 through May 2010 totaling 46,300 MWh.

References

Wind Energy Act (PL 2007, Ch. 661)

http://www.mainelegislature.org/ros/LOM/LOM123rd/123S1/PUBLIC661_ptA.asp

- Governor's Office of Energy Independence and Security, 2009 Report to Legislature: "*State of Maine's wind energy goals and realization of tangible benefits*" as required by Public Law 2007, Ch. 661 (LD 2283).
- Report of the Governor's Task Force on Wind Power Development (February 14, 2008) <u>http://www.maine.gov/doc/mfs/windpower/index.shtml</u> http://www.maine.gov/doc/mfs/windpower/summaries.shtml
- Natural Resources Council of Maine, personal communication with Dylan Voorhees, September 16, 2010
- LURC files: Development Permit DP 4788 (Stetson I), DP 4818 (Stetson II), and DP 4794 (Kibby I)
- Maine Renewable Energy Association windpower website http://www.windforme.org/

Grid-scale wind energy development in Maine as of September 2010

Project/date	LURC/	# of	MW -	MW - Under	MW - Permit	In planning
	DEP	turbines	Operational	construction	under review/	stages
					appealed	
Mars Hill/First Wind	D		42			
Freedom/Beaver Ridge	D	3	4.5			
Vinalhaven/Fox Island Wind	D	3	4.5			
Stetson I/First Wind	L/D	38	57			
Stetson II/First Wind	L	17	25.5			
Kibby I/TransCanada	L/D	44	66	66 – All		
				operational by		
				12/10		
Rollins/First Wind	D			60		
Record Hill/Independence Wind	D	22		55		
Kibby II/TransCanada	L	11			33	
Highland Wind/ Independence Wind	L				128	
Oakfield/First Wind	D	34			51	
(approved, appealed to law court)						
Spruce Mountain/Patriot Renewables	D	11			18	
Saddleback/Patriot Renewables	D	20			34.5	
Roxbury/Longfellow	D	20			50	
No 9 Mtn./ Horizon/ Aroostook Wind - On hold,	D	130				195 MW
phase one of a larger project + 250 - 450 MW						Mostly LURC
Bull Hill/First Wind	L					X – met towers
Bowers Mtn/Champlain Wind/First Wind	L					X –met towers
						rulemaking
Atlantic Wind/Iberdrola SO Co.	D?					X – met towers
Atlantic Wind/Iberdrola WA Co.	D?					X – met towers
Nobel Environmental/Passadumkeag Mtn.	D?					X - met towers
Blue Sky West/First Wind (Mayfield, Kingsbury,	D?					X - met towers
Blanchard)						
Total MW >>			199.5	181	314.5	
695 MW if all in first 3 categories constructed						

Map of Maine showing wind power project locations

Blue dots – Met towers (large blue dots are clusters) Red dots – Proposed or approved projects Green dots – Possible development areas



Exhibit E: Additional Information Regarding the Wind Resource at the Bowers site

Response to Request for Information on the Quality of the Wind Resource

A quality wind resource is a necessary prerequisite for a commercially viable wind energy project, and Champlain has the benefit of site- and region-specific wind data that demonstrates the strength of the wind at the Bowers project site. For example, in the case of Stetson I, First Wind erected meteorological towers to measure the wind. First Wind then went to the next step of engaging AWS Truewind, LLC (now AWS Truepower), a company that provides expert services on wind resource assessment, to conduct a detailed study of the wind resource in that region. The on-site meteorological data and the more detailed wind resource study conducted by AWS confirmed the viability of the wind speeds at the Stetson site. The work by AWS extended to surrounding areas, including the Bowers site, and indicates the potential strength of the wind resource at the Bowers project site. Additionally, Champlain installed three meteorological towers at Bowers in the fall of 2009. The analysis of the site-specific meteorological data that has been collected from the Bowers site since the fall of 2009 indicates that the project site hosts a mean wind speed of 7.5 m/sec., which represents a commercially viable wind resource. The continued collection of on-site data will allow Champlain to refine its analysis of the strength and distribution of wind speeds over time and facilitate micro-siting of turbines to maximize wind capture and energy production.

Exhibit F: Landworks Response to Visual Impact Issues

Response to Visual Impact Issues Raised in the Hearing and Comment Period Related to the Request of Champlain Wind, LLC to Add Portions of Kossuth Township to the Expedited Permitting Area for Wind Energy Development

October 12, 2010

Prepared by:



228 Maple Street, Suite 32 Middlebury, VT 05753 802.388.3011 www.landworksvt.com info@landworksvt.com

Prepared for:

Champlain Wind, LLC c/o First Wind, LLC 179 Lincoln Street, Suite 500 Boston, MA 02111 617.960.2888 www.firstwind.com

Table of Contents

Section 1: Concerns Regarding Visual Impacts to Resources Beyond 8 Miles	1
1.1 The Effects of Distance on Views	1
1.2 Wind Project Visibility and Distance	2
1.3 Public Perception of Wind is Changing	3
1.4 Night Sky Impacts	5
Section 2: Photo Montage Review	6
Section 3: Line of Sight Sections Review	7
Section 4: Local Scenic Resources	8
Literature Cited	9
LandWorks Qualifications1	0



Section 1: Concerns Regarding Visual Impacts to Resources Beyond 8 Miles

1.1 The Effects of Distance on Views

Aesthetic experts agree that the visual impact of wind turbines diminishes over distance. They employ techniques that assess background, mid-ground and foreground views.

The National Forest's Handbook on Scenery Management, which is based on years of research and work in the National Forest, and is relied on as a basis for visual assessment by professional and regulatory review bodies, identifies the fact that visual impact is based, in part, on the "degree of discernible detail" and that the background of a view (4 miles* to the horizon) has less detail, insofar as "texture has disappeared and color has flattened". The Handbook also sets forth the use of distance zones and indicates that with increased distance the "concern" level for visual impact or impacts to overall scenic integrity lessens.

In addition to "distance zones," the Forest Service also employs a concept called visual absorption capability (VAC) as a tool to assess a landscape's susceptibility to visual change caused by man's activities. In other words, it is a measure of a land's ability to absorb alteration yet retain its visual integrity. In their report entitled "Visual Absorption Capability," they note that the most used perceptual factor in determining VAC is observation distance: "As distance from the observer to the activity increases, VAC generally increases."

This is reinforced by the understanding that with distance an alteration in the landscape (e.g. turbine array) "takes up" less and less of the total 360-degree panorama. It follows from this that as a project appears diminished in scale and breadth on the horizon, so is its consequent visual impact. The accompanying diagram presents this characteristic of visibility.



Diagram 1: Effect of Distance on View Angle

N.T.S.

*The Forest Service SMS uses 4 miles for the upper limit of mid-ground views while the Forest Service Visual Management System (VMS) uses 3 – 5 miles.



1.2 Wind Project Visibility and Distance

Views of wind projects over distances greater than 6 miles have reduced potential for visual impact from such projects. This is due to several distinct factors:

- The visibility of individual blades, which are usually around 6 feet plus or minus at their widest point, and the entire rotor assembly, is diminished after 6 miles and difficult to see when still or spinning. Policies on wind power developments such as those promulgated by the Green Mountain Club for the Long Trail in Vermont (a 270-mile hiking trail which runs the length of Vermont and is contiguous with the Appalachian Trail for 95 miles) consider projects 6 miles or beyond to be in the "background zone" of the view and therefore potentially less impacting to the Long Trail experience. The background zone classification used for the Long Trail is based on the U.S. Forest Service Scenery Management System, a tool for inventorying and managing scenic resources in the National Forest.
- Based on field observations and visual assessment work done by LandWorks and others in this area
 of expertise, there is general agreement that the relative scale of a wind project, and the individual
 turbines associated with it, is reduced at 7 miles and beyond to become less visible and less
 dominant on the horizon. The perceived size of turbines at this distance is greatly reduced, rendering
 them less prominent and thus reducing their visual presence and thus, correspondingly, their visual
 impact.



This photo was taken in upstate New York of the Fenner Wind Farm from a distance of approximately 7 miles. Hub height is 213 feet and rotor diameter is 231 feet.

- Beyond 6 miles intervening and/or nearby visual conditions, development and landscape elements reduce the eye's tendency to focus on more distant objects.
- Atmospheric conditions also reduce the potential for visual impacts from wind turbines when viewed at distances beyond 7 or 8 miles. Haze from humid air, cloud cover and lighting conditions can reduce



visibility and lessen the prominence of wind turbines in the distance. While back lighting or bright lighting can sometimes increase prominence of such structures, the view at distances of over 7 miles might be a distraction or a disturbance to some but at that distance such views cannot be considered disruptive, or capable of undermining the experience of the immediate landscape. Typically well over 50% of the days in New England are cloudy or overcast, reducing potential visibility and consequent visual impacts.

Landscape Architects who have worked on a number of wind energy developments in Maine generally agree on the concepts of impacts diminishing over distance:

- In Jean Vissering's March 2002 report, Wind Energy and Vermont's Scenic Landscape: A Discussion Based on the Woodbury Stakeholder Workshops, she states, "With increasing distance the turbines will appear to be a smaller and smaller part of the overall view. Beyond about 7 miles, turbines are likely to seem so small as to be insignificant in the view." [1] Ms. Vissering continues with, "Prominence has to do with both distance and position in the view. Wind turbines diminish in prominence quickly with distance. ... As distance increases, the turbines will become a much smaller portion of the overall view, and therefore, less dominant. At five miles, turbines will be visible, but much less prominent." [2]
- In Jim Palmer's review of a proposed wind project in Maine, he reaffirms that the Act itself recognizes that views beyond certain distances diminish visual impacts:

The concept of distance zones is presented in section 5.2 of the VIA. The thresholds that are listed were developed by the USDA Forest Service for the more arid western part of the country, and may not be appropriate for the more humid conditions in the northeast. In any case, the perceptual definition of distance zones is what really matters, and wind turbines confound these traditional thresholds. So, the foreground for a wind turbine may be less than a half-mile because they are composed of smooth materials without much apparent texture. However, the middle distance may extend further than 4 miles because the basic elements of a turbine are so large that they remain recognizable at distances where most naturally occurring landscape elements (e.g., trees) have ceased to be individually recognizable. I believe that this is fundamentally the reason why the threshold where wind turbines were determined to no longer have a significant potential impact was set at 8 miles by the Wind Energy Act. While turbines may be visible beyond 8 miles, they will be relatively indistinct and it may not be possible to detect the motion of the blades.[3]

A key consideration in the evaluation process is the fact that there are many lakes with similar characteristics and scenic values located within the 8-mile study area of the project, which will be fully evaluated as part of a specific visual impact assessment. The Commission therefore will have an opportunity to evaluate the project-specific impacts on more proximate resources as part of a development application. Although resources have distinct scenic and other attributes, the impact of visibility will be more significant on those resources within the 8-mile study area. Impacts beyond the 8-mile radius of statutory focus will be less significant, due to the fact that visibility and the significance of visibility diminish over distance.

1.3 Public Perception of Wind is Changing

Utility scale wind turbines and arrays of such turbines—often referred to as "wind farms"—are relatively new to the New England region and the Maine landscape. There have been a number of local, national and international studies and reports which have addressed the public reaction to and acceptance of utility scale turbines, their towers and the associated landscape modifications required for the siting of such installations. The work of Paul Gipe and others, as well as numerous surveys and studies, have addressed the public's perception of wind power, and there is evidence that wind energy development is gaining support.



Recent polls increasingly demonstrate public support for wind power, including in areas of high scenic value. For example, the *Critical Insights on Maine* survey, a comprehensive, statewide public opinion survey of registered voters that covers a variety of topics, indicates that 90% of Maine people support wind power development as a way to reduce our dependence on fossil fuels and produce jobs and other economic benefits. [8] A more recent poll conducted by the Pan Atlantic SMS Group for the Maine Renewable Energy Association (MREA), found that 88% support wind power statewide and 83% in the "rim counties," which are the rural counties where development of wind facilities is more likely. [9] Additionally, a recent poll conducted by the Vermont Department of Public Service found that 90% supported a wind farm being built within the view of their home, with 75% strongly supporting the development of a wind farm within view of their home. [4] Research presented in the publication "Wind Power In View" has also highlighted increased public understanding and acceptance of wind generation as a viable alternative to fossil fuels; of relevance to placing wind farms in the Maine landscape is the view presented by noted landscape architect Robert Thayer, who stated that well designed and "well sited wind energy projects can achieve a serviceable beauty common to other working landscapes." [5]

In response to these factors and insights, and in relation to grid-scale wind projects in Maine, it is important to consider a number of key factors when assessing visual impacts from wind projects. These factors include: 1) the historic working landscape of the state that has tapped into it's renewable resources; 2) a tradition of a resource based landscape that is not pristine and, in fact, has been utilized for extensive logging; and, 3) the public's increasing recognition that wind provides an alternative to other forms of more harmful and unsustainable energy generation.

Wind generated power, and windmills themselves, have been in use in America since the first one was built on Manhattan Island in 1633. In fact, the seal of the City of New York has a windmill design as its centerpiece. Lithographs of Nantucket in the early 1800s show windmills above the bustling harbor. From the 1940s on, grid scale wind power has been developed in Vermont, with turbines on Little Equinox Mountain from 1986 to 1994 and with the Searsburg Wind Farm, which was developed in the late 1990's and is still in operation. Thus the form and shape of the classic windmill is not new, nor is the notion of wind power being interconnected with and part of the working landscape.

The working landscape is now changing to accommodate new forms of energy generation, as represented by wind, solar and biomass. As John Stilgoe pointed out in his book *Landscape and Images*, "...the American vernacular landscape will change and change again, ceaselessly reflecting the unprecedented complexity and rate of economic, technical and social change...the vernacular landscape is often the first to indicate changes in lifestyle and attitude, because it is the built form that shapes the lives of most Americans." [6] Wind energy represents an example of technical change to accommodate the changing values and needs of our population. But change is often difficult to accept. When large scale manufactured metal silos were introduced into the agrarian landscape of New England in the mid 20th century, there were initial concerns about their visual impacts - they represented a change from the smaller scale wood strip and tile sided silos which were dwarfed by the larger, newer designs - those manufactured "Harvestore" type silos can now be seen on scenic postcards and are an accepted part of the pastoral landscape.

There is also widespread assumption that wind projects inevitably result in adverse visual impacts. However, many viewers see wind turbines as representative of technological innovation and beautiful examples of modern design that are representative of the well established design ethic of "form follows function". When considered in this context, wind turbines, with their towers and rotors, are simple, unadorned and elegant elements in the landscape that visually represent their purpose.

Given the increasing public acceptance and understanding of grid scale wind energy development, and the notion that the working landscapes of Maine and Northern New England are changing to reflect new forms of resource use and management, with wind being one such resource, it can be concluded that the consequent visual impacts of wind are not always necessarily negative or adverse.



1.4 Night Sky Impacts

There is relatively little impact from the FAA required L-864 red flashing beacon to the night sky. In other words, the nature and angle of the light's distribution is such that it does not: 1) create glare or direct bright light in any viewer's eyes; 2) create night time sky glow such as what is commonly observed over towns and cities; and, 3) affect any viewer's ability to see and appreciate the stars and night sky.

The key visual issue with these lights is that they typically represent new lights in the landscape, and the on-off blinking aspect of such light can annoy viewers who are accustomed to having an "unfettered" view of the night sky. The potential for visual impact from these required lights is reduced by the simple fact that people are not typically recreating at night or spending long periods of time out of doors, particularly in the cooler months and during winter.

A report developed for the FAA on night lighting by James Patterson stated that "...studies have suggested that the use of ...L-864 fixtures are effective in reducing impacts on neighboring communities, as the fixtures' exposure time is minimal, thus creating less of a nuisance." [7]

As with visual impacts during daytime hours, the visibility and prominence of the safety lighting at night will diminish with the distance. Over 8 miles, the lights themselves will appear to be very small points in the distance, given their actual size and light color and intensity. As with the turbine array itself, the amount of the visible 360-degree panorama that the required aircraft safety lighting will occupy will also diminish with the distance, as illustrated in Diagram 1 of this Response.



Section 2: Photo Montage Review

Note: Sections 2 and 3 are responses to specific exhibits submitted by others in this proceeding.

A photo-realistic visual simulation must be prepared in a technically appropriate manner in order to ensure that the simulation is a reasonably accurate depiction of proposed project components in terms of location, scale, and physical appearance.

In terms of location and scale, a 3D model must be created and utilized in order to locate the proposed wind turbines appropriately in the landscape. The 3D turbine models are placed in a 3D terrain environment (generated from GIS data) at appropriate elevations, and a 3D view is established to correlate with the vantage point of the visual simulation photo. This 3D view simulates the effects of perspective and allows one to account for the screening effects of topography and vegetation when creating the simulation. Topography and vegetation often serve to limit the visibility of portions of some turbines, while they may block views completely of others.

The 3D view of the model ensures that the turbines are located appropriately in space and depicted at a realistic scale in relation to their terrain environment. Visually scaling the height and placement of turbines on a photo is an unscientific and unreliable method of creating a simulation. It is simply impossible to anticipate how turbines will realistically relate to their terrain environment without the aid of a 3D model. In order to accurately fuse the 3D rendered model with the photo, it is also crucial to utilize a camera with a particular focal length, record the coordinates of the viewer location with a GPS device, and record the angle of view.

In terms of physical appearance, turbines should be rendered to reflect the particular atmospheric and light conditions of the photo. The date and time of day that the photo was taken is accounted for in the turbine rendering to ensure that the light and shadow effects are realistic. In addition, the potential effects of atmospheric haze and distance are also accounted for in a realistic rendering of turbines. The end product should be convincing - it should look like the turbines are actually in their environment.

The photomontage submitted by the opposition (Figure 3) was not constructed in accordance with the above outlined established methods and standards for visual simulation construction. Because this location is within eight miles of the project, it will be evaluated as part of the development application and a simulation prepared in accordance with accepted methodologies will be provided as part of that application. Generally, however, the turbines in the montage are massive and dominant in the landscape in a completely unrealistic manner. Indeed, if the montage were accurate, the turbines would be on the order of 200' higher in elevation than what is proposed, and the towers appear up to three times wider than what is proposed. In terms of location, the turbines are too tightly clustered, and the spacing is inaccurate. Topography and vegetation between the turbines and the viewer would actually serve to screen much of the towers, and the rotors would appear much lower. It was noted on the montage that the Bowers MET tower (not visible in the photo) confirms their height calculation, but there is no explanation as to why this is the case. A MET tower on Dill Hill in close vicinity to the proposed turbines could serve as a useful means to visually confirm the height of the turbines, but the Bowers MET tower is much further away and subsequently diminished in scale due to perspective. Lastly the turbines are not rendered to reflect the particular atmospheric and lighting conditions of the photo. The white turbines appear too dark, even accounting for the shading effects of clouds. The fact the blades are in the same position for each rotor is also unrealistic, as they are all spinning independently. Based on all of these factors, this photomontage is a misleading and inaccurate depiction of the proposed project.

When specific turbine locations are identified at the application stage of the Bowers Wind Project, a comprehensive Visual Impact Analysis that utilizes all the established methods for visual simulations will be conducted.



Section 3: Line of Sight Sections Review

No information was provided to explain what software or topographic data was utilized to produce these line of sight sections. Without creating our own line of sight sections from the same vantage points, we cannot fully comment on their accuracy. However, there are some issues to note even if we assume that the terrain has been accurately depicted in the form of graphic sections.

One of the main issues with these line of sight sections is that they do not account for the screening effects of tree cover. This area is heavily forested, and trees would serve to block views of the turbines in many locations. This is readily apparent in Exhibit 1 A, which indicates that there would visibility of the turbine from the northern shore of Pleasant Lake. This would not be possible, however, due to the screening effects of shoreline trees. Likewise, the shoreline trees would prevent the views that are indicated in Exhibit 1E and 1J. It also appears that trees could potentially block the views indicated in Exhibits 1B, 1C, and 1I.

Another issue is that these line of sight sections are to a "400' tower". This is misleading, as the tower is no taller than the hub at 262'-6". It is only the tip of a blade that would reach above 400', and blades in themselves have negligible visual impact when viewed from a distance due to their smaller width. Of the 11 line of sight sections presented, 6 of them are over 8 miles in distance, 3 are over 5 miles in distance, and 2 are less than 5 miles in distance. For a general discussion regarding distance and visual impacts, see Section 1: Concerns Regarding Visual Impacts to Resources Beyond 8 Miles.

Line of sight sections can be a valuable tool to investigate whether or not a particular wind turbine would be visible from a critical vantage point. They must be prepared with the best available topographic data and must account for the screening effects of trees (based on observed tree heights) in order to be reliable. Typically the line of sight would depict how much of a turbine would be visible, as opposed to just indicating that the very top of a blade would be visible. Even when line of sight sections are prepared correctly, they can be misleading because they don't account for how the human eye actually perceives the turbines in the broader landscape.

When specific turbine locations are identified at the application stage of the Bowers Wind Project, a comprehensive Visual Impact Analysis that utilizes all the established methods for line of sight sections will be conducted.



Section 4: Local Scenic Resources

Locations that May Include Viewpoints of Potential Local Significance	Carroll Visible	Kossuth Visible	Notes
Carroll Church	Y	Y	Carroll Church is not believed to be in active use and is not a destination historic resource. When viewing the church or memorial, Kossuth is behind the viewer.
Route 6	Y	Y (limited)	Route 6 is not a scenic byway, does not include any scenic turnouts, and is not known for scenic qualities. It is primarily forested with some areas that show evidence of logging and scattered residential development.
Baskahegan Stream	Y	Y (limited)	The canoe trip is primarily accessed from Route 6 and travel is towards Baskahegan Lake, away from Kossuth. Majority of shoreline is hardwood forest and vegetation blocks views of Kossuth for most of stream.
Maine Public Reserved Land (between Duck and Keg)*	Y	Y (limited)	This 1.5 square mile parcel is ~6 miles from Proposed Addition and is heavily forested. There may be areas of limited visibility from edges of forest and along roads.
Almanac Mountain	Y	Y (limited)	Almanac Mountain is heavily forested although there are privately-owned scenic outlooks that include views of Kossuth. <i>There are new public trails and new</i> <i>outlooks currently under construction.</i>
Baskahegan Lake	Y	Y	Closest area of lake is ~ 7 miles from Proposed Addition but most of lake is more than 8 miles away.
East Musquash Lake	Y	Y	Lake is ~6 miles from Proposed Addition. Southern shoreline - where there are some camps and homes - would have minimal views of Kossuth because of vegetation.
East Musquash Lake Rest Area	N	N	No visibility from boat launch or rest area.
Lowell Lake	Y	N	No visibility.
Mill Privilege Lake	Y	N	No visibility.
Trout Lake	N	N	No visibility.
Springfield Fairgrounds	N	N	NO VISIDIIITY.

*Viewpoints, if any, from land along the shores of Duck and Keg lakes will be addressed as part of the visual assessment of the project from those two lakes, which are scenic resources of state or national significance.



Response to Visual Impact Issues Raised in the Hearing and Comment Period Related to the Request of Champlain Wind, LLC to Add Portions of Kossuth Township to the Expedited Permitting Area for Wind Energy Development

Literature Cited

- [1] Jean Vissering, Wind Energy and Vermont's Scenic Landscape: A Discussion Based on the Woodbury Stakeholder Workshops, (March 2002).
- [2] Vissering
- [3] James F. Palmer, *Review of the Spruce Mountain Wind Project Visual Impact Assessment*, (for Maine's Land Use Regulation Commission, June 2010).
- [4] Vermont Department of Public Service website on Vermont's Energy Future http://www.vermontsenergyfuture.info/Final.
- [5] Pasqualetti, Gipe, et al., Wind Power in View, (San Diego: Academic Press, 2002).
- [6] John R. Stilgoe, Landscape and Images, (Charlottesville: University of Virginia Press, 2005).
- [7] James W. Patterson Jr., *Development of Obstruction Lighting Standards for Wind Turbine Farms*, (For the Federal Aviation Administration, 2005).
- [8] Critical Insights, *Critical Insights on Maine* Tracking Survey: Residents' Views on Politics, the Economy & Issues Facing the State of Maine, November 2009
- [9] Pan Atlantic SMS Group, Report to MREA: Highlights of Survey Findings, May 2010



LandWorks Qualifications

LandWorks is a Vermont based interdisciplinary planning and design firm with a focus on visual and aesthetic assessment. LandWorks has 25 years of experience throughout New England in addressing the planning and permitting requirements of energy generation and transmission projects, from grid scale wind, to nuclear power to hydroelectric development. The analysis, permitting work and testimony we provided to the Vermont Department of Public Service (DPS) on the PV 20 Transmission Line resulted in the burial of a critical segment of that corridor in a highly visible and scenic area of Lake Champlain. This was the first undergrounding of a high voltage transmission line in the State of Vermont. Since that landmark project we have provided aesthetic and environmental assessment services in the review of 5 major transmission line projects in Vermont, and have also been advocates for municipal power companies in their efforts to upgrade their transmission and distribution facilities.

We have also provided DPS with aesthetic assessment services in the permitting and construction of the first and only operating utility scale wind farm in Vermont, in Searsburg, and assisted in the oversight of project construction. We have continued our involvement in wind energy and have worked on several wind projects that have been proposed or approved for Vermont, as well as having consulted on out of state wind projects, including Rollins Wind and Oakfield Wind in Maine.

The firm's Principal, David Raphael, has served as an expert witness in the Superior Courts and in Act 250 and Act 248 on behalf of the State of Vermont and for numerous public and private sector clients. He was on the Design Issues Study Committee appointed by the Secretary of the Agency of Natural Resources that reviewed Criterion 8 of Act 250, provided guidance for the publication *Vermont's Scenic Landscape - A Guide to Growth and Protection* and established Agency policy on aesthetics and the Quechee Analysis. Based on his expertise and experience, Mr. Raphael was asked to present his firm's work on aesthetics and transmission corridors to the annual conference of the Institute of Electrical and Electronics Engineers (IEEE) in Montreal in 2006, and have contributed to the Blue Book on Compact Line Design as promulgated by the Institute.





PARTNERSHIP FOR THE PRESERVATION OF THE DOWNEAST LAKES WATERSHED (PPDLW)

October 12, 2010

Land Use Regulation Commission Department of Conservation 22 State House Station Augusta, Maine 04333-0022

Subject: Rebuttal of comments made by Champlain Wind, LLC with regard to Proposed rule Number 2010-P211, Petition to Add Portions of Kossuth Twp. to the Expedited Permitting Area for Wind Energy Development

I. Overview

Comments submitted by Mr. Neil Kiely of Champlain Wind, LLC about the importance of the proposed Kossuth expansion are overstated and based on opinion rather than fact. Moreover, his comments about the impacts of the proposed expansion are understated and misleading.

Specifically:

- If Mr. Kiely's reasoning for a geographic extension of the expedited permitting area were adopted, the boundaries of the expedited permitting area would have no meaning whatsoever because any geographic feature crossing a boundary could be annexed to the expedited permitting area, regardless of its importance to the natural character of the excluded area.
- 2) First Wind and Juliet Browne, Champlain Wind's parent company and attorney respectively, were actively involved in the process which determined that the portion of Kossuth Twp south of Rte 6 should specifically be excluded from the expedited permitting area.
- 3) Opinion is not evidence. There is no evidence that seven turbines on this particular site with only "poor to marginal" wind capacity would make a significant contribution to achieving the State's wind power goals.
- 4) The electric generation potential of the turbines to be located within the Kossuth expansion is grossly overstated because it assumes capacity factors that are not appropriate for a site with only "poor to marginal" wind capacity.
- 5) There is no evidence in either Mr. Kiely's comments, nor the PUC staff letter referenced, that the project is viable. Again opinion is not evidence.
- 6) Conflicts with the principal values and goals of the Commission's Comprehensive Land Use Plan are grossly understated. When discussing the negative impacts, Mr. Kiely improperly

limits his focus to the 695-acre proposed expansion area only and ignores the severe impacts on the surrounding natural areas.

- 7) Contrary to Mr. Kiely's assertion, development of the proposed Kossuth expansion would not leave more remote regions of the jurisdiction "intact" while "protecting the associated primitive recreational opportunities"; in fact, it would threaten existing recreational uses and the regional economy that depends on them.
- 8) Contrary to Mr. Kiely's assertion that the "only" scenic resources of significance in the region are eight lakes or ponds, the entire St. Croix Watershed is an area of state and national (and indeed, international) significance.
- 9) Mr. Kiely mistakenly limits consideration of the potential scenic impacts of the proposed Kossuth expansion to 8 miles. That 8-mile limit only applies when a proposed development is located <u>inside</u> the expedited permitting area. The 8-mile limit has no place in the deciding the current petition. To apply it to the unexpedited Kossuth parcel is an exercise in circular logic.
- 10) Contrary to Mr. Kiely's assertion, the area lakes <u>do</u> possess unique features and unique recreational opportunities and allowing industrial scale wind turbines 428' high within the viewshed of this region would unreasonably affect the users' recreational experience of the resource.
- 11) Contrary to Mr. Kiely's assertion that there would be only limited views of the proposed turbines at Kossuth, the turbines would, in fact, be visible from all of the lakes, would loom over at least five of the lakes, and would dominate important views from primitive campsites, boat launches, and undeveloped beaches.
- 12) Mr. Kiely is getting ahead of himself claiming that the view of the Kossuth turbines will be only an incremental impact from turbines on Bowers; Mr. Kiely is speaking as if the Bowers Project is already permitted, which it is not.
- 13) Mr. Kiely mistakenly excludes "local" scenic resources from consideration. Because the Kossuth lands are not part of the expedited permitting area, impacts to these local scenic viewpoints must be considered before the Commission acts on the Petition.
- 14) Contrary to Mr. Kiely's assertion, the unique character of this lakes region <u>does</u> rise to the threshold of rendering the area fundamentally incompatible with the development of industrial scale wind turbines.
- 15) Extending the expedited permitting area to include this portion of Kossuth could lead to the erection of wind turbines that will not fit harmoniously with the land.

Each of these points is explained and substantiated below.

1) If Mr. Kiely's reasoning for a geographic extension of the expedited permitting area were adopted, the boundaries of the expedited permitting area would have no meaning whatsoever because any geographic feature crossing a boundary could be annexed to the expedited permitting area, regardless of its importance to the natural character of the excluded area.

According to Mr. Kiely:

The map of the boundaries of the expedited area illustrates that the Penobscot County line and Route 6 were used as convenient boundary lines for the designated expedited wind area. The proposed addition is thus a natural extension across a political boundary that is unrelated to geography, an example specifically noted in the guidelines. (Neil Kiely, Champlain Wind, LLC, 9/22/10 Presentation to LURC, p. 1.)

Were the Commission to adopt Mr. Kiely's reasoning and extend the expedited area to include more of the ridge, simply because the ridge crosses a political boundary, then the boundaries of the expedited permitting area would have no meaning. Virtually any ridgeline crossing the boundary could be annexed to the expedited permitting area. This cannot have been intended for the hundred or so ridgelines that cross the boundary in various parts of the State.

Instead, it makes more sense to consider why the Legislature *excluded* areas from development. What was it trying to protect? Is the geographic feature in question logically connected to that intended protection?

In this case it is clear that the area intended for protection from expedited permitting is a substantial portion of the St. Croix Watershed. Specifically, the excluded area includes a stunning chain of lakes and environs – with natural character and quality that has been thus far protected through an extraordinarily successful series of preservation efforts including those by the Downeast Lakes Land Trust and its supporters, and the State of Maine, through the Land for Maine's Future Program and others. One can reasonably conclude that this region was excluded from the expedited permitting are to preserve its natural character. Because industrial development of the Kossuth land in question would threaten that natural character of this protected area, that land is not a logical geographic extension of an area appropriate for industrial development.

Furthermore, Mr. Kiely states that the proposed Kossuth parcel is "adjacent to Route 6" implying that it shares a border with the border of the expedited permitting area. In trith, the Kossuth parcel is <u>not</u> adjacent to Route 6. The property line described in the lease is as much as a half mile from the road while Dill Hill is .9 miles from the road. This means it is likely that even if the Commission grants this petition, Champlain Wind's primary access road and staging/storage area will not be within the expedited permitting zone.

2) First Wind and Juliet Browne, Champlain Wind's parent company and attorney respectively, were actively involved in the process which determined that the portion of Kossuth Twp south of Rte 6 should <u>specifically</u> be excluded from the expedited permitting area.

At the time when First Wind and Juliet Browne were helping establish the outline of the expedited permitting area, they already had the Mars Hill, Stetson I, Stetson II and

Rollins projects at various stages of development. They were hardly newcomers to the wind game in Maine. Their petition to change the definition of the expedited permitting area is nothing more than a matter of convenience for them. The Commission should not consider the developer's convenience as reason enough to handicap the economy of this region.

3) Opinion is not evidence. There is no evidence that seven turbines on this particular site with only "poor to marginal" wind capacity is important to achieving the State's wind power goals.

According to Mr. Kiely:

"... the Maine PUC noted that Maine was far short of reaching its statutory wind power goals an that the expansion of the expedited permitting area to accommodate 57 MW of wind power should be considered as important... " (Neil Kiely, Champlain Wind, LLC, "9/22/10 Presentation to LURC", p. 2.)

There are at least three problems with this comment:

First, Mr. Kiely appears to be suggesting that expansion of the expedited permitting area is important because *the goals only just established* by the Maine Legislature have not yet been met! With this argument, any large scale industrial wind project proposed anywhere in Maine would have to be considered "important" – even if it were located on the Statehouse lawn.

The second problem is that it is entirely opinion – no analysis, and no evidence. Mr. Kiely's opinion that it is important, and PUC staff's inferred opinion that it is important, are only that opinions – and as such are not more important than the opinions of anybody else. The PUC did not undertake an analysis of wind potential in Maine, and what it will take to achieve the goals outlined in the expedited permitting law. In fact, the authors of the expedited permitting law conducted no such analysis.

Indeed, it appears as though the State's wind power goals could be achieved entirely with



Maine's greatest wind potential lies offshore, and offshore development could achieve Maine's wind development goals many times over.

offshore wind development. According to MaineBiz, citing Habib Dagher from the University of Maine, "The Gulf of Maine is some of the most powerful [wind power] in the world, whipping at average winter speeds of 21 miles per hours, and *capable of producing at peak up to 100 gigawatts of electricity, equivalent to the power output of 100 Maine Yankee nuclear plants, or 10% of the entire nation's electricity needs.*"¹ (Emphasis added.)</sup>

Please note that Maine's wind goals are 2000 MW by 2015, 3000 MW by 2020, and 8000 MW by 2030 – a mere fraction of the offshore potential. Because offshore turbines are so much larger than onshore turbines, fewer would be needed. So clearly it is possible to achieve Maine's wind development goals without sacrificing the natural character of the Downeast Lakes.



¹ MaineBiz, January 26, 2009, <u>Gale Force</u> by Sara Donnelly

If you look at the map of wind power at 50m developed by Truewind Solutions (above), using their Mesomap system and validated by the National Renewable Energy Laboratory, the wind potential of the proposed Kossuth extension is rated only "poor to marginal." Indeed, Truewind's analysis showed that the best wind potential in Maine is offshore.

It is hard to believe that meeting the State's wind goals depends on development of a site that wind experts – the same wind experts relied upon in the Report of the Governor's Task Force on Wind Power Development -- rate as merely "poor to marginal", when there is offshore potential thousands of times that of Kossuth. With this in mind, we trust that the Commission will disregard the *opinions* of interested parties, and rely instead on its own common sense.

And third, Mr. Kiely and the Maine PUC have again distorted the facts by providing projected output figures based on both the Bowers and Kossuth projects in order to bolster their argument. The Kossuth project is the matter at hand and that consists of only seven turbines with a nameplate (not actual) capacity of only 16.1 MW. When Mr. Keily and the Maine PUC refer to 57 MW, they are exaggerating the nameplate capacity by 256%.

4) The electric generation potential of the turbines to be located within the Kossuth expansion is grossly overstated because it assumes capacity factors that are not appropriate for a site with only "poor to marginal" wind capacity.

According to Mr. Kiely's comments:

"The Maine PUC estimated that a 57-MW facility would generate enough energy to serve the electricity needs of approximately 23,500 Maine households... " (Neil Kiely, Champlain Wind, LLC, "9/22/10 Presentation to LURC", p. 2.)

Here again, Mr. Kiely and the Maine PUC are conveniently bundling the Kossuth Project with the Bowers Project when they refer to a 57-MW facility. This rulemaking proceeding is about the proposed Kossuth expansion only. Seven Siemens 2.3MW turbines will have a nameplate capacity of 16.1 MW and, using Mr. Keily's 30% efficiency figure, deliver a mere 4.8 MW. There is no evidence, from Mr. Kiely, from the Maine PUC, or from anyone else that seven turbines on this particular piece of land will contribute significantly to achieving the State's wind power goals.

5) There is no evidence in either Mr. Kiely's comments, nor the PUC staff letter referenced, that the project is viable. Again – opinion is not evidence.

Mr. Kiely offered the following (emphasis added):

"The Maine PUC writes that although **it has not conducted an analysis** of the viability of the Bowers Project **it concludes that it is reasonably likely** that the proposed project is viable." (Neil Kiely, Champlain Wind, LLC, "9/22/10 Presentation to LURC", p. 2.) Because the PUC by its own admission conducted no analysis, and since Champlain Wind offered no analysis, there is no basis in the record to conclude that the project is "viable." Just because a PUC staff member has an opinion does not make it fact.

Mr. Kiely goes on to say:

"(the PUC) supports this conclusion by noting that the Bowers Project is proximate to Stetson which also is owned by First Wind. It will be able to utilize the transmission line built for Stetson, and First Wind's technical and financial ability to build the project is demonstrated by its development and operation of three existing wind energy facilities in the state. ... I would like to expand on one of the points ... which is Bowers' proximity to the Stetson Wind Project. Approximately 9 years of wind data have been collected by meteorological wind towers at Stetson, which is relevant to Bowers because of its proximity and similar elevation... In addition, the Bowers Project has been collecting wind data from 3 meteorological towers since November of 2009."

Mr. Kiely would have us believe that because the project is "proximate" to Stetson, and because wind data has been collected at Stetson, the Bowers project is necessarily viable. There are at least four problems with his reasoning.

The first problem is the assumption that because Stetson is proximate the proposed Bowers project is viable. There are about 8 miles of land between Stetson and Bowers. Should we conclude that all of that land is viable too? Or that all land within 8 miles of Stetson are viable project sites? Is all land within 8 miles of <u>any</u> industrial wind project viable? If so, it is clear that the Kossuth expansion is not "important" for achieving the State's wind power goals.

The second problem is that Mr. Kiely is erroneously comparing the terrain around Stetson to that of the Kossuth parcel. If you read the testimony of Ms. Kate Roseberry, she did a marvelous job of showing the topographical difference between the two sites (see page 151 of the document KossuthRuleCommentsAsOf_100410.pdf"). Stetson Ridge is east of the low lying Mattawamkeag River basin and has few if any peaks to obstruct the wind. This terrain gives Stetson unobstructed access to the prevailing

westerly winds. On the other hand, the Kossuth parcel is somewhat protected from the prevailing westerly winds by a long continual series of peaks and ridges that extend some 30+ miles all the way to the Penobscot River. To suggest that this difference in topography will not lead to different wind characteristics would be foolish.



Another factor to be considered in comparing the Stetson site to the proposed Kossuth site is the configuration of the turbines. In Champlain Wind's original petition, Figure 2 (right) clearly shows that the turbines will have a generally east-west configuration whereas Stetson has a distinct north-south configuration. Studies have shown² that the there can be significant efficiency loss when turbines are placed parallel to the prevailing wind





because of a factor called "wake effect". A turbine placed upwind of another turbine will outperform the downwind turbine. Stetson's north-south configuration is ideal. The proposed Kossuth (and Bowers) configuration will result in considerable wind effect and will therefore generate less electricity.

The third problem is that the existence of wind data does not prove project viability. It certainly does not provide viability if the data is from a completely different site several miles away. Even though some data has been collected at Bowers Mtn, it does not prove project viability. In fact, by Mr. Kiely's own admission, there is less than one year of data. This is woefully inadequate given that according to First Wind's Form S-1/A filed with the Security Exchange Commission, 90% of the projects currently in their development pipeline have more than 3 years of meteorological data.³ *But even that meager one year of data has not been provided.* There is no evidence in the record about project viability – only opinion.

The fourth problem is the assumption that because a project is generating power, and because the owner of that project wants to build at an additional site, both projects should be considered "viable." **Bankruptcy court is full of cases involving people and companies who pursued developments they thought to be viable.**

Indeed, First Wind, the parent company of Champlain Wind, filed a Form S-1 with the SEC which contained the following statement of opinion by KPMG LLP, its independent accounting firm:

"...the Company has suffered recurring losses from operations and negative operating cash flows, has an accumulated deficit amounting to \$116.4 million as of December 31, 2007, and does not have sufficient resources available to meet its funding needs through January 1, 2009.

² Optimal Micro-Siting of Wind Turbines by Genetic Algorithms Based on Improved Wind and Turbine Models, a paper presented by Chunqiu Wan, Jun Wang, Geng Yang, Xiaolan Li and Xing Zhang to the Joint 48th IEEE Conference on Decision and Control. Available at www.ppdlw.org/articles/wakestudy.pdf

³ First Wind's S-1 filing, Amendment 6 filed with the SEC May 14, 2010, page 1. See this document at: http://www.sec.gov/Archives/edgar/data/1434804/000104746910005272/a2195887zs-1a.htm

Those conditions raise substantial doubt about its ability to continue as a going concern."⁴

Furthermore:

"First Wind also characterized its debt load as "substantial," reporting that it was carrying \$516.9 million in debt as of June 30. Among the company's loans is a \$77.3 million loan that comes with a **17 percent annual interest rate** and matures in March 2013."⁵ (emphasis added)

In the case of industrial wind development, it also is important to remember that the financial incentives to the developer are front loaded. For example, developers can opt for an investment tax credit the year the facility is put in service, rather than the production tax credit which pays out over time. The IRS also allows wind energy projects to be depreciated using Modified Accelerated Recovery System (MACRS). This allows the developer to write-off the value of their equipment (using an "adjusted basis") from taxable income over only 5 years. With the deduction heavily weighted in the earliest years, wind developers get significant tax savings faster than other industries.

6) Conflicts with the principal values and goals of the Commission's Comprehensive Land Use Plan are grossly understated. When discussing the negative impacts, Mr. Kiely improperly limits his focus to the 695-acre proposed expansion area only and ignores the severe impacts on the surrounding natural areas.

In his consideration of Principle Value 1 – Economic Value to the Jurisdiction, Principle Value 2 – Diverse and abundant Recreational Opportunities, and Principle Value 4 – Natural Character, Mr. Kiely improperly considered only impacts *within* the proposed 695-acre addition. There is no such limitation in the law, and indeed, it is common practice when considering industrial development to consider impacts to the region.

In particular, the comments were remiss in that they did not consider recreational and related economic impacts within the St. Croix Watershed, and to the West Grand chain of Lakes in particular. Because the proposed project would loom so large on the horizon it would significantly compromise views. Those compromised views would have an unreasonable adverse effect on the scenic character of these resources. And the compromised views would have unreasonable adverse effects on existing uses related to the scenic character.

Existing recreational uses in the region that would be impacted are many. According to a publication of the International Joint Commission (IJC)⁶, there are many existing recreational uses in the region, including fishing, boating, canoeing, swimming, cross-country skiing, snowshoeing, wildlife viewing and camping – including primitive camping. There were, for example, 7000 recreational canoeists in the 2007 season alone.

We would add ATVing, hiking, photography, snowmobiling and hunting to this list.

⁴ Opinion letter dated July 31, 2008 and entered into Form S-1 on same date. Available at: http://www.secinfo.com/dVut2.t8Bs.d.htm and http://www.faqs.org/sec-filings/091222/First-Wind-Holdings-Inc_S-1.A/a2195887zex-23_2.htm

⁵Boston Business Journal, August 10, 2010, <u>Revenue, Losses double for First Wind</u> by Kyle Alspach

⁶ <u>St. Croix River: State of the Watershed Report</u>. International Joint Commission, 2008.

While we are not able to quantify all of the recreational uses and associated activity at this time (PPDLW is staffed entirely by volunteers), we do know that sport fishing alone accounts for some impressive economic activity in the region.

According to the IJC:

"... [Sport fishing] has been popular since the 1800s when visitors would hire guides to take them to Grand Lake Stream. Today, its economic value remains high, bringing in \$5.45 million annually based on 75,000 angler-days, with the economic contribution of an angler-day of fishing estimated at \$72.61 (Jordan 2007)

It is estimated that at least \$1 million comes from Grand Lake Stream alone."7

In fact, fishing is said to be second only to forest products as an economic driver in the region.

Would fishing be impacted by industrial wind development? Please consider this. There is recreational fishing in every state, and there are lakes with fish close to major metropolitan areas. If "fishing" were in itself a particular experience, people from away who enjoy fishing would fish close to home. But the people from away decide to spend hundreds, even thousands of dollars, to come to the Downeast Lakes year after year to fish. They do it because they place a very high value on the experience of fishing <u>in our wildlands setting</u>. Some fishermen say that catching fish is the least important part of fishing. Others, at the end of a fishless day of paddling, will remark what a marvelous day it was. What this region (currently) offers is an increasingly rare scenic character and quality of place.

The IJC report also notes that "*The St. Croix region is thought to represent the highest density of employment in the sporting camp and guiding businesses in Maine.*" Sporting camps by their very nature depend on access to remote locations and undeveloped natural places -- including undeveloped views.

Mr. Kiely suggests that recreational opportunities might actually increase with development of industrial wind turbines, because snowmobilers might choose to travel to the turbines as a destination. And to be fair, there surely would be people who would want to see the wind turbines.

But what he didn't say is that the people who come to the Downeast Lakes for remote camping, fishing, hunting, boating, paddling, snowshoeing, sporting camps, wildlife viewing and so forth – many of these will go somewhere else. Because these existing recreational uses are, as the Commission explicitly recognizes in its Principle Value 2, significantly enhanced by the large stretches of undeveloped land and vistas. If you take away that "significant enhancement," you take away what attracts current users and supports a substantial portion of the regional economy.

An April 1997 report from the University of Maine documents the integral role that Great Ponds -- such as the eight Class 1A Great Ponds that would be affected by this project –

⁷ Ibid.

play in Maine's economy.⁸ According to the report, "The total direct expenditures by lake users are estimated to be \$1.8 billion annually. Of this total \$0.3 billion (15 percent) is new money that is brought into the state economy each year by nonresidents. The \$1.8 billion in direct expenditures result in over \$2.8 billion in total economic activity. Of this total, nearly \$0.4 billion (13%) is attributable to nonresidents. Overall economic activity associated with Great Ponds represents 5% of Maine's gross regional product... The economic activity associated with lakes leads to over \$1.2 billion in annual income for Maine residents and supports over 50,000 jobs... The net economic value of Maine's Great Ponds is \$6.7 billion... Net economic value is nearly four times greater than direct expenditures, which indicates the high quality of Maine's lakes."

In other words, decrease the quality of Maine's lake, and there is a direct correlation with economic impacts and a lake user's willingness to pay.

Please note that the above estimates are in 1996 dollars. Adjusted for inflation, that would be \$2.53 billion in direct expenditures, and \$1.7 billion in total economic activity.

7) Contrary to Mr. Kiely's assertion, development of the proposed Kossuth expansion would not leave more remote regions of the jurisdiction "intact" while "protecting" the associated primitive recreational opportunities; in fact, it would threaten existing recreational uses and the regional economy that depends on them.

According to Mr. Kiely:

"Importantly, the area is not known for primitive recreational pursuits, and by allowing wind energy development here, the Commission can accommodate renewable energy projects important to advancing the Commission's climate change and energy goals while keeping the more remote regions of the jurisdiction intact and protecting the abundant primitive recreational opportunities that such areas provide." (Neil Kiely, Champlain Wind, LLC, "9/22/10 Presentation to LURC", p. 4.)

Existing recreational uses and the regional economy that depends on them are threatened by wind development on Dill Hill Ridge in Kossuth. The following images show how views of the proposed Kossuth turbines would dominate the landscape. If the view changes from one of pristine natural beauty to a developed backdrop, the natural character of the region certainly would not be "intact".

See Exhibit 1 for an accurate scale rendering of how the turbines in Kossuth will appear from several area lakes.

Overall, the West Grand region includes:

- 23 boat launches, 15 of which would see wind turbines from Kossuth.
- 21 breathtaking public campsites, 13 of which would see wind turbines from Kossuth.

⁸ Boyle, Kevin et al. <u>Great Ponds Plan an Integral Role in Maine's Economy</u>. Water Research Institute, University of Maine, RE 473, April 1997.

The West Grand Chain of Lakes also includes numerous sporting camps, all of whom rely on the natural character of the region to attract repeat customers.

Nan Sprague, of Hazelwood's of Maine on West Grand Lake says: "I have clientele who come here for the beauty of our area and our great fishing... One in particular, Terry Junghans is a professional photographer and has been coming here for more than 20 years to enjoy the natural resources of our area."

Charles Driza of Leen's Lodge on West Grand Lake says: "The area is a true gem of a wilderness area and we enjoy sharing this wilderness with our guests every year. We have guests that have been coming to the lodge for generations due to the beauty and unchanging aspects of the area. Some of our guests were here with their fathers and grandfathers and now bring their grandchildren."

Lindsay Wheaton, of Grand Lake Lodge on West Grand Lake says: "Our guests come to our lodge because of the natural resources – to fish for landlocked salmon on West Grand Lake, to flyfish the Stream, to hunt birds, bear or deer, or to enjoy the undeveloped shorelines and the quiet. We often have guests comment that they forgot how many stars are in the sky because of light pollution in the cities. They come to appreciate the rich cultural history of the guides and sporting camps."

It seems reasonable to conclude that other recreational users – including those who make use of the primitive campsites, those who enjoy the undeveloped beaches, those who paddle the quiet waterways, those who come here simply to watch nature in all its grandeur – also come year after year because of the unspoiled scenery.

The Downeast Lakes Watershed is a long way from population centers. Many other easier-to-access destinations exist. But so many of us affirmatively choose the Downeast Lakes because they remain so untouched by man.

PPDLW would also like to point out that climate change and energy goals are not and should not be the Commission's guiding star. The Commission's goal must be to stay true to its enabling legislation and its Comprehensive Land Use Plan. And in so doing, to balance all interests – whether they are represented in this proceeding or not. Because in the end, stakeholders each advocate for their own individual interests. And any given project has pros and cons. But it is the Commission who must sort through it all and do what is best for Maine people as a whole, and for future generations.

8) Contrary to Mr. Kiely's assertion that the "only" scenic resources of significance in the region are eight lakes or ponds, the entire St. Croix Watershed is an area of state and national (and indeed, international) significance.

Mr. Kiely does acknowledge that the proposed addition is visible from scenic resources of state and national significance, although he significantly understates the extent and importance of those resources.

Among other things, he said:

"The only scenic/recreational resources of state or national significance in the area within eight miles of Kossuth are eight lakes or ponds..." (Neil Kiely, Champlain Wind, LLC, "9/22/10 Presentation to LURC", p. 4.)

On the contrary, the entire St. Croix Watershed is of state, national, and international significance.

This protected region extends from the Maine Public Reserved Land around Duck Lake across the St. Croix Watershed (west to east), and from just above tidewater on the Machias River to Forest City and across the border into Canadian conservation lands (south to north). Protection of this region and its scenic character has been one of the greatest conservation successes of our time.

The St. Croix Lakes Watershed is clearly of both national and international significance, as demonstrated by the attention of the International Joint Commission (IJC), a binational organization for jointly protecting boundary waters between the U.S. and Canada.

According to an IJC report, as of 2006. "Over 700.000 acres (283,290 ha), or 67%, of the St. Croix River watershed is under some form of protection, and approximately 42% of the watershed land is permanently protected. Of the permanently protected lands, about 80% are located in Maine. These lands are composed of state conservation lands (2%), including 3,019 acres (1,222 ha) along Spednic Lake and the Upper St. Croix River; U.S. conservation lands (1%), which include a portion of Moosehorn National Wildlife Refuge in Baring, ME; and private conservation lands, such as those managed by land trusts (76%). Permanently protected lands in New Brunswick include provincial protected natural areas (17%), such as the Spednic Lake Protected Natural Area: Provincial Parks (2%); and non-government conservation



lands (<1%)." The report went on to say that the amount of protected lands increased twenty fold between 1996 and 2006.⁹ For more detail about the recreational value of this area see Exhibit 2.

Protection of substantially more land is in process. The 21,700-acre West Grand Lake Community Forest was selected as the #1 national priority for funding by The Forest Legacy Program of the U.S. Forest Service in fiscal year 2011. In an objective and highly competitive process, the Forest Service recognized the exceptional wildlife habitat, public recreation, and economic values of the project. It has allocated \$6,675,000 in fiscal year 2011 to the Downeast Lakes Land Trust's 21,700 acre West Grand Lake Community Forest.¹⁰

The U.S. Forest Service, like the Downeast Lakes Land Trust and its many supporters, have recognized that this region is unique and a top priority for preservation.

Recent State investments of more than \$9 million to preserve the Downeast Lakes is additional evidence that both the entire St. Croix Watershed and the West Grand Chain of Lakes are both individually and together scenic resources of state and national significance. Preserving the natural character of the St. Croix Watershed is an established state priority as evidenced by recent and substantial conservation investments. The State of Maine, through the Lands for Maine Future Program, has invested or committed about \$8 million to preservation of this region already, as shown below.

Project	Description	Year	LMF Investment*
Forest City	523 acres in fee, 13 acres of easement	1992	\$272,000
	including 4 miles of shoreline		
Forest City-Mud Lake	0.6 acres in fee	1995	\$2,500
Spednic Lake	18.7 acres in fee, 830.6 acres in	1994	\$115,000
	easement – 16.13 miles of shoreline		
Grand Lake Stream	163 acres in fee, 108 acres in easement	1995	\$70,000
	 – 3.3 miles of stream frontage 		
Spednic Lake St.	2,773 acres in fee 15.6 miles of lake &	2003	\$1,435,000
Croix River	33.6 miles of river shoreline		
Downeast Lakes	26,996 acres in fee with extensive	2004 &	\$1,500,000
	shoreline	2005	
Machias River I	5,772 acres in fee, 13,177 acres in	2003	\$2,794,624
phase I	easement, 184 miles of river & stream		
Machias River – II	7,630 acres in fee – extensive lake	2006	\$1,750,000
	shore frontage		
Machias River III	anticipating ~27 000 acres of easement	2010	\$573,000

The State of Maine's Recent Investments in Preservation of the Natural Character of the Downeast Lakes Region Through the Land for Maine's Future Program (LMF)

* Because LMF funds are matched with other dollars, the total investment in the conservation lands in this region is significantly greater than the \$7,939,000+ of LMF funds.

⁹ <u>St. Croix River: State of the Watershed Report</u>. International St. Croix River Watershed Board and the International Joint Commission. http://www.ijc.org/rel/boards/saint/watershed_report_e.htm

¹⁰ Downeast Lakes Land Trust, <u>Downeast Lakes Traditions</u>, Volume 4, Issue 1, Summer 2010, p. 1.

That the Legislature excluded the West Grand Chain of Lakes and environs from the expedited permitting area is evidence in itself that this unique and outstanding natural feature is a scenic resource of state and national significance.

9) Mr. Kiely mistakenly limits consideration of the potential scenic impacts of the proposed Kossuth expansion to 8 miles. That 8-mile limit only applies when a proposed development is located <u>inside</u> the expedited permitting area. The 8-mile limit has no place in the deciding the current petition. To apply it to the unexpedited Kossuth parcel is an exercise in circular logic.

Because the area addressed by the Kossuth Petition is currently excluded from the expedited permitting area, and because the law specifically requires the Commission to consider consistency with the principle values and goals in its Comprehensive Land Use Plan, and because that plan very specifically values scenic quality and natural character -- the Commission must consider all significant scenic impacts, regardless of distance.

10) Contrary to Mr. Kiely's assertion, the area lakes possess unique features and unique recreational opportunities and allowing industrial scale wind turbines more than 428' high within the viewshed of this region would unreasonably affect the users' recreational experience of the resource.

According to Mr. Kiely's comments:

"In general, the area lakes do not possess unique features ... (t)o the contrary, there are many lakes that offer similar scenic and recreational value within the region and within the jurisdiction... The landforms are similar throughout the region and do not include dramatic mountain views or complex landforms that are more typical of areas of unique visual or scenic value... The predominant use of the lakes is for boating and fishing, and allowing wind power within the viewshed of these lakes will not unreasonably affect the users' recreational experience of the resource.." (Neil Kiely, Champlain Wind, LLC, "9/22/10 Presentation to LURC", p. 5.)

If Mr. Kiely's reasoning that a viewshed with relatively small mountains, such as those in the Downeast Lakes region is not worthy of preservation, then the Allagash Wilderness Waterway would not exist – nor would national parks and monuments and wilderness areas nationwide. There are many different kinds of beauty. Some do indeed involve dramatic mountain ridges. Others involve a gentler and more peaceful beauty like the Allagash, and like the Downeast Lakes.

We think it's safe to say that anyone who ever has traveled the waterways of the Downeast Lakes – watching the morning sun touch the pristine mountains and eagles soar overhead – anyone who ever has traveled West Grand Lake through Junior Stream to Junior Lake, and from Junior up Bottle Stream into Keg Lake, or into Scraggly Lake – anyone who has experienced the view of mile after mile of undeveloped shoreline and ridge tops, the very views that the Native Americans saw when traveling this area

hundreds of years ago on their traditional canoe routes – anyone who has actually seen and experienced this area could not question its unique scenic character and value.

The Commission's Comprehensive Land Use Plan explicitly recognizes the value of large expanses of wildlands and protected watersheds. Mr., Kiely's assertion that allowing wind power within the viewshed of these lakes will not unreasonably affect the users' recreational experience of the resource could not be more wrong.

11) Contrary to Mr. Kiely's assertion that there would be only limited views of the proposed turbines at Kossuth, the turbines would, in fact, be visible from all of the lakes, would loom over at least five of the lakes, and would dominate important views from primitive campsites, boat launches, and undeveloped beaches.

Mr. Kiely asserts the following:

"In many instances, there will be only limited views of turbines and at distances that will diminish the significance of the views."

The turbines proposed in the Kossuth petition would be visible from no fewer than six Class 1A and two Class 1B Great Ponds. Owing to the region's unique topography, they will be visible from a total of twelve Great Ponds that are located within both a scenic region and watershed of state and national significance.

Mr. Kiely also asserts that:

"Although the turbines will be visible on the horizon, they will not loom over the lakes or dominant (sic) the views from the lakes." (Neil Kiely, Champlain Wind, LLC, "9/22/10 Presentation to LURC", p. 5.)

PPDLW is pleased that even Mr. Kiely appears to acknowledge that turbines looming over the horizon and dominating views would be a problem and grounds for the Commission to deny its Petition. Why else would he make the above claim?

If the definition of "loom over the landscape" is that the turbines would dwarf other features on the landscape, then the turbines most certainly will loom over at least five of the lakes, and would dominate views from many primitive campsites, boat launches, and undeveloped beaches.

It is not simply that the turbines cannot fit harmoniously into the landscape. The turbines will dominate the landscape as shown in Exhibit 1. It also is incorrect to assume that turbines viewed from a distance are insignificant. Grand Lake Stream, for example is 17 miles from the proposed project site – and guests of sporting camps there clearly value the undeveloped scenic backdrop, and comment negatively on the one small public radio tower located on Almanac Mountain – a tower only 49% of the size of the proposed wind turbines. Turbines on Kossuth would transform the scenic backdrop for a spectacular chain of lakes from true wildlands to a developed industrial landscape.

The transformation of scenic character from wildlands to an industrial backdrop would have an unreasonable adverse affect on the scenic character of the resources, on existing recreational uses related to that scenic character, and on the many small businesses and jobs that depend on them – and would fundamentally conflict with the Commission's core mission.

12) Mr. Kiely is getting ahead of himself claiming that the view of the Kossuth turbines will be only an incremental impact from turbines on Bowers; Mr. Kiely is speaking as if the Bowers Project is already permitted, which it is not.

According to Mr. Kiely:

"In all instances, the views of turbines within the petition area will be an incremental visual impact from turbines in Carroll." (Neil Kiely, Champlain Wind, LLC, *"9/22/10 Presentation to LURC"*, p. 5.)

Not only is the Bowers Project not approved, so far as we know, no permit application has even been submitted.

PPDLW remains hopeful that when the time comes to consider the Bowers application, the Commission will thoroughly consider the costs and benefits to the people of Maine, and not just the benefits to those people and stakeholder organizations who have a financial interest in the development or who have accepted donations from First Wind or Champlain Wind.

13) Mr. Kiely mistakenly excludes "local" scenic resources from consideration. Because the Kossuth lands are not part of the expedited permitting area, impacts to these local scenic viewpoints must be considered before the Commission acts on the Petition.

Mr. Kiely's comments suggest that scenic impacts on "local public resources" with views of the proposed Project need not be considered.

PPDLW respectfully suggests that scenic impacts of the proposed Kossuth turbines must be considered for the following reasons:

- Kossuth is currently outside of the expedited permitting area.
- It is only within the expedited permitting area that consideration of scenic impacts is limited to those on scenic resources of state and national significance.
- 35-A §3453 specifically requires the Commission to ensure that the principal values and goals of its Comprehensive Land Use Plan are not compromised.

But even in the event the Commission adds the Kossuth parcel to the expedited permitting area, these scenic impacts must be considered because:

- They are within the St. Croix Watershed, which is a scenic resource of state, national and international significance.
- They are proximate to the West Grand Chain of Lakes, which is a natural feature and scenic resource of state and national significance.

14) Contrary to Mr. Kiely's assertion, the unique character of this lakes region does rise to the threshold of rendering the area fundamentally incompatible with the development of industrial scale wind turbines.

The transformation of scenic character from wildlands to an industrial backdrop would have an unreasonable adverse affect on:

- The scenic character of the resources,
- Existing recreational uses related to that scenic character, and
- The many small businesses and jobs that depend on them.

Allowing this transformation would fundamentally conflict with the Commission's core mission and would render the area fundamentally incompatible with the development of industrial scale wind turbines.

15) Extending the expedited permitting area to include this portion of Kossuth could lead to the erection of wind turbines that will not fit harmoniously with the land.

Much is made of the removal of the requirement that a wind project must fit harmoniously with the land. We would like to point out that this applies only to projects proposed to be sited in the expedited permitting area. It does not apply to Kossuth at this time. In deciding whether or not to add Kossuth to the expedited permitting area, it is perfectly reasonable to require that the resulting use will fit harmoniously with the landscape. In fact, we would argue that to ignore this issue would be to violate values 2, 3 and 4 as presented in the 2010 Comprehensive Land Use Plan:

- The principal value, diverse and abundant recreational opportunities, explicitly mentions that unique opportunities exist for "recreational activities which require or are significantly enhanced by large stretches of undeveloped land.
- The principal value diverse, abundant, and unique high-value natural resources and features, specifically emphasizes lakes, scenic resources, and mountain areas – and specifically recognizes that recreation is an increasing economic driver in the Commission's jurisdiction and the State.
- The principal value natural character explicitly acknowledges the value of remoteness – the relative absence of development over large areas and the increasing rarity of such places.

In the specific case of the St. Croix Watershed and the West Grand chain of lakes, these values are entirely dependent upon proactively maintaining the harmony of our landscapes.

Conclusion

Others before us have perhaps said it best:

"Maine's principal advantage in today's global economic competition is our Quality of Place. We have majestic mountains, unbroken forests, open fields, wild rivers, pristine lakes, a widely-celebrated coast, picturesque downtowns, lively arts and culture, authentic historic buildings, and exceptional recreational opportunities. We must learn to think of them as the basic infrastructure of Maine's future prosperity."

<u>Quality of Place and Job Growth: A New and Needed Maine Investment</u> <u>Strategy</u>, 2nd Report of the Governor's Council on Maine's Quality of Place, (May 2008)

Members of the Commission: please do not trade this region's future prosperity for a wind project that would develop what even the "Report of the Governor's Task Force on Wind Power Development" showed to be only a "poor to marginal" wind resource.

EXHIBIT 1

Accurate Scale Rendering of How the Kossuth Turbines will Appear from Area Lakes

In both cases the easternmost MET tower, known as BOWMET3F (60m), is visible in the original, fullsized photograph. For accuracy, it was used as a reference to provide scale when rendering the turbines.



This is a view of Kossuth's Dill Hill from the campground and boat launch on the south shore of Pleasant Lake. Bowers Ridge appears just above the swimming raft.



This is a view of Kossuth's Dill Hill from a public campsite on the southeast side of Scraggly Lake. Bowers Ridge forms the horizon on the left.

EXHIBIT 2

Excerpt from the International Joint Commission's St. Croix River: State of the Watershed Report

Recreational Uses

The large land base, series of interconnected lakes and streams, and tidewaters provide opportunities for recreational fishing, boating, canoeing, swimming and other sports, along with wildlife viewing on the St. Croix. Hiking, cross-country skiing, snowshoeing, wildlife viewing and camping are popular land-based activities. A number of campgrounds and boat accesses throughout the watershed, and a series of primitive campsites along the boundary waters, serve the recreational public.

The St. Croix region is thought to represent the highest density of employment in the sporting camp and guiding businesses in Maine (Jordan 2007). Sport fishing alone generates valuable federal and state tax revenue from the sale of fishing tackle, fuel, licenses, food and lodging.

Sport fishing in the St. Croix area has been popular since the 1800s when visitors would hire guides to take them to Grand Lake Stream. Today, its economic value remains high, bringing in \$5.45 million annually based on 75,000 angler-days, with the economic contribution of an angler-day of fishing estimated at \$72.61 (Jordan 2007).

It is estimated that at least \$1 million comes from Grand Lake Stream alone. \$2.2 million, or half of the total economic value of sport fishing, is derived solely from smallmouth bass fishing, based on their catch ability and long season compared to other fish such as landlocked salmon or trout (Jordan 2007).



Estimates above include surveyed waters only. Including estimates from non-surveyed waters, total angler-days are approximately 75,000 (Jordan 2007).

Is recreational use increasing?

Outdoor recreation is gaining popularity in the St. Croix region and may be the fastest growing water use in the St. Croix watershed. In fact, recreation is second only to wood harvesting and processing as the waterway's most important resource-based industry (SCIWC 2007).



A 1999 survey of recreational users revealed that canoes are the most common type of craft used on the waterway, and that canoeing was the primary reason that users chose the St. Croix (Stacey & Daigle 2001). Canoeing opportunities exist for all skill levels on both the lakes and the river. One can choose a day trip on a lake, paddle the undeveloped backcountry in the upper watershed, or canoe a full 90 miles of boundary waters over a period of 7-10 days.

A full season survey by the SCIWC in 1990 identified 2,879 canoeists using the upper St. Croix River. Allowing for users missed, the Commission estimated the total number of canoeists that year to be between 3200-3500. Anecdotal information available to the Commission suggests that the number of users in 2007 was more than double that figure, with the largest increase in the past 5 years (Sochasky 2007). Concerns about environmental effects from increased use point to the need for a follow-up user survey to more accurately track increased recreational use over time, and to help develop management plans for future use.

Future Management Considerations

The Maine-New Brunswick management plan for the St. Croix International Waterway has several policies to address recreational use in the watershed. Specific actions focus on longterm protection of Spednic Lake and the upper river; ensuring adequate public access sites and facilities; identifying and addressing recreational user conflicts; managing existing fisheries for quality and sustainability; expanding boating facilities and services at the upper and lower ends of the waterway; and encouraging additional low-impact water recreation. To: Land Use Regulation Commission From: Lynne Williams, Esq. Proposed Rule Number: 2010-P211 Rebuttal Comments October 12, 2010

I represent the Committee to Preserve the Downeast Lakes Region, and am submitting these comments as rebuttal to the comments submitted by the Petitioner, Champlain Wind, LLC, by Lakeville Shore, and by the various environmental groups that apparently support this petition.

Supporters argue that the land that at issue in this matter is a logical extension of the land already in the expedited area. This is simply not true. When the expedited area was created by the Wind Power Task Force, it is assumed that the inclusion of land in the expedited area, and exclusion of other land, was deliberate. As 12 M.R.S. §685-A(13) provides, expansion of the expedited permitting area by the Commission must be in accordance with 35-A M.R.S. §3453, which states:

> "The Maine Land Use Regulation Commission may, by rule adopted in accordance with Title 5, chapter 375, add a specified place in the State's unorganized or de-organized areas to the expedited permitting area. In order to add a specified place to the expedited permitting area, the Maine Land Use Regulation Commission must determine that the proposed addition to the expedited permitting area: 1. Geographic extension. Involves a logical geographic extension of the currently designated expedited permitting area;"

It is unfortunate that the Wind Power Task Force failed to keep, or perhaps just to retain, notes of their deliberations, so it could be ascertained why they chose to exclude from the expedited area the 695 acres in Kossuth Township that are at issue in this petition. Perhaps they chose to respect geographical and/or geopolitical boundaries, given that Kossuth Township is in Washington County, while neighboring Carroll Plantation is in Penosbscot County. Or perhaps they chose to recognize that Dill Hill, in Kossuth Township, overlooks Pleasant Lake, rated 1-A in LURC's 1987 Great Lakes study. Or maybe they just decided that the natural resource values of this part of Kossuth were too valuable to litter with industrial developments. There is simply no way to know.

Whatever the reason for excluding the Kossuth Township land at issue in Champlain Wind's petition, the fact of the matter is that it was excluded. Champlain Wind, and their parent entity,

FirstWind, cannot argue that it is now necessary to add the Kossuth land to the expedited area in order to permit them to avoid petitioning for a rezoning for this part of the proposed project area. First Wind, through their attorney Juliet Browne, was a full, and vocal, participant in the Wind Power Task Force, and its creation of the expedited wind area. Failure to include the Kossuth land in the original expedited wind area is likely based on one, or both, of the following reasons: either the Task Force as a whole recognized that the Kossuth land has natural resource, scenic or other values that made it inappropriate for industrial grid-scale wind development; or, they chose to respect geopolitical boundaries. First Wind likely concurred with the decision, whatever the basis.

Yet now First Wind has changed its plans and decided that it would make things easier for their subsidiary, Champlain Wind, if Kossuth was included in the expedited wind area. I think it behooves the Commissioners to look closely at the petition of a party who was a key element in the Wind Power Task Force and who subsequently requests something that was rejected by the Task Force when they designed the expedited wind area.

Likewise, the Commissioners should look closely at a petition that is submitted based on the convenience of the petitioner rather than the fact that the additional area provides a logical geographic extension of land in the original expedited area. A look at the map of the Carroll Plantation part of the expedited area clearly indicates that the proposed addition in Kossuth is not a logical geographic extension to the Carroll land, but rather a piece of land that will allow First Wind to connect more easily to its project on Stetson Mountain, without having to go through a rezoning process. While this may be advisable from a business standpoint, the Commissioners need take no notice of Champlain Wind's business preferences, but rather must determine whether, as the statute states, the land to be added "involves a logical geographic extension of the currently designated expedited permitting area;" We contend that it does not.

We also ask that the Commissioners take into account the fluid nature of the Guidance Document on the addition of land to the expedited wind area. Earlier this year, the Commissioners declined to add land on Sisk Mountain, part of the Kibby II application, to the expedited area, citing that fact that LURC was considering changes to the Guidance Document that it utilized to make such decisions. And, at the September 1, 2010 LURC meeting, staff noted that it would be necessary for the Commissioners to obtain more information, and engage in a full discussion, on the topic of cumulative impact as it relates to the addition of land to the expedited wind area. The earliest time frame for such a discussion is November 2010. At the September meeting, the unanimous decision was to hold off on ratifying a final amended guidance document until such time as the issue of cumulative impact was resolved.

First Wind currently has Stetson and Stetson II up and running. Mars Hill is up and running. The Rollins Wind Project has been permitted. First Wind has been working to get the town of Eastbrook to change their ordinance to allow industrial development, and plans to come before LURC for a wind farm in the neighboring Township 16. The latest plan is First Wind's proposal to install turbines from Abbot to Bingham. And, of course, there is the project that they are proposing for Carroll Plantation and possibly Kossuth Township.

If ever anything suggested that there needs to be a serious consideration of cumulative impact it is this overall plan, which does not even include the wind farms proposed by Independence Wind, TransCanada and Patriot Wind. It is imperative that the Commissioners not allow First Wind, or any of their many subsidiaries, such as Champlain Wind, to skirt by without such an analysis being done, merely because they submitted their petition prior to the Guidance Document being amended. Approving a petition to add land to the expedited wind area is discretionary with the Commissioners, and the Commissioners can take into account many factors, including cumulative impact. The Guidance Document, as staff noted at the September 1 meeting, is just that – guidance. It is not binding, nor is it exclusive, and the Commissioners can consider factors in addition to those included in the document, when making their decision.

We urge the Commissioners to consider these comments in rebuttal and to deny Champlain

Wind's petition, as they did with the TransCanada petition regarding the Sisk Mountain land. Whether or not to add land to the expedited area is a discretionary decision, as noted above. The Commissioners can deny a petition for any reason, or for no reason at all. It is not akin to an adjudicatory decision, where the Commissioners must grant a development permit if the applicant meets the Chapter 10 Standards. Considering the natural resource, scenic and recreational values of this land, as well as the ambiguity about the reason that the Kossuth land was excluded, the Commission must err on the side of protecting these values and deny the petition to expand the expedited wind area into Kossuth Township. Respectfully submitted,

Lynne Williams

Lynne Williams, Esq.

Peter Fisher P.O Box 212 West Enfield, ME 04493 October 12, 2010

Land Use Regulation Commission Department of Conservation 22 State House Station Augusta, Maine 04333-0022

Subject:

Rebuttal to the Sept. 22 testimony of Neil Kiely, representing Champlain Wind LLC's Petition to add portions of Kossuth Township to the Expedited Permitting Area for industrial wind development.

My opinion:

I wish to contest what I believe to be a distortion as to the nature of the region within which the Proposed Addition is located. I believe the Proposed Addition to be within a vast wilderness of a primitive nature. I believe the region is sparsely populated, most of which is along the primary roads, of which there are few. I believe that the nature of the lakes within this region is absolutely unique, the scenic shorelines being a characteristic that renders them so.

Rebuttal:

My Kiely's testimony at one point refers to the Proposed Addition as being currently utilized for forest harvesting. He also mentions that within a mile of the Addition there are only 6 "structures". He says "the area is not known for primitive recreational pursuits".

Mr. Kiely goes on to state that turbines may be placed in the Addition "while keeping the more remote regions of the jurisdiction intact and protecting the abundant primitive recreational opportunities that such areas provide".

Another quote is "the only scenic/recreational resources of state or national significance in the area within the 8 miles of Kossuth are eight lakes and ponds."

I find these and other comments by Mr. Kiely as contradictory and misleading. I know that in many comments he is referring specifically to the acreage within the Proposed Addition. That space may not be of great significance if it were to be extracted from the rest of the universe and could be seen on its own. But, of

course it can't and the issues surrounding this proposal should weigh the activities that may take place within the Addition on the surrounding areas beyond the Addition. For this reason the nature of the surrounding areas must be accurately characterized.

Mr. Kiely at one point characterizes the Addition as being little utilized and as forest lands and at other times attempts to portray it as being in a rural community. I would profess that the Proposed Addition is in a wilderness area that has few year-round residents, limited access, is utilized for a variety of "primitive recreational activities' and is situated on the edge of a vast wilderness region of which there are well over 300,000 protected acres of wilderness.

The Proposed Addition is not "adjacent to Route 6", but is 2000 to 3000 feet off of Rt. 6, which, by the way is a road that the state has attempted to promote as a scenic drive from Lincoln to Canada.

To trace the perimeter of the Proposed Addition and measure a mile from any point of that perimeter would encompass a vast area, in which Mr. Kiely says "there are only 6 structures." Sounds like a wilderness region to me. A bear hunting camp with a woodstove and bunkbeds for 6, a wood shed and an outhouse might be 3 "structures".

Principal Value 4: Natural Character: Natural Character, which includes the uniqueness of a vast forested area that is largely undeveloped and remote from population centers. Remoteness and the relative absence of development in large parts of the jurisdiction are perhaps the most distinctive of the jurisdiction's principal values. These values may be difficult to quantify but they are integral to the jurisdiction's identity and to its overall character.

The Proposed Addition is not located in an area of LURC jurisdiction that is undeveloped or remote from population centers. It is adjacent to Route 6, and automobile access is available through existing improved logging roads. The Proposed Addition is located within 10 miles from the organized towns of Springfield, Topsfield, and Talmadge and adjacent to Carroll Plantation. The Proposed Addition is within eight miles of an operating wind energy facility and within five miles of the transmission line connecting that facility to the electrical grid. It is also bounded by DEP jurisdiction.

In the above clip from Mr. Kiely's testimony, I would argue that the character of the region surrounding the Proposed Addition is much more like Principal 4 than Mr. Kiely's characterization. I have the full list of property owners for the town of Carroll and Lakeville. Carroll has 68 properties that are legal residents of the more that 256 property owners. Only 26.5% of the property owners are residents, or **68 households**. Lakeville has 12.6% of its property owners as residents, or **67 households**. There is no town center, post office, gas station, grocery store or the like in either Carroll, Lakeville or in Kossuth. Carroll's town office is open for a few hours on one day a week, as is Lakeville's office.

Looking at a topo map, from Springfield to Route 1 there are only 2 state or town maintained roads turning south off Rt. 6, one dirt, that have multiple residences. From the Brown Rd. it is 17 miles north to Rt. 1. Virtually everything south of that portion of Rt.6 is forested land with few residents other than those immediately

on Rt. 6. Every resident does all their shopping and business in Lincoln or Bangor.

Summary:

I would ask that the Commission does not allow the Proposed Addition to go to Expedited Zoning. Champlain Wind repeatedly infers that numerous visual site surveys, avian studies, etc. will be done after the Proposed Addition is rezoned and if they enter a permit. I would ask that the land in question remain as it is and that any permit request be required to utilize the existing permit reviews of the Commission. This is a unique area of the state and I feel that if this area does not deserve the full review of the Commission, than there is no area that does. Thank you for your time and commitment.

Peter Fisher

Jackson, Ellen

From: Kevin and Marie [mainlymaine@fairpoint.net]

Sent: Tuesday, October 12, 2010 5:50 PM

To: Horn-Olsen, Samantha

Subject: Emailing: Fwd_ Rebuttal Comments_ Champlain Wind _ Kossuth

Attachments: Fwd: Rebuttal Comments: Champlain Wind / Kossuth

Samantha and Fred,

Our non-profit group, the Partnership for the Preservation of the Downeast Lakes Watershed (<u>www.PPDLW.org</u>) submitted our group's rebuttal comments this afternoon at 12:30. However I'd like to make just a brief comment or two here from myself and my family. The attached rebuttal comments from a neighbor, Gary Campbell, echo my sentiments almost exactly. At the Lee public hearing on Kossuth, I spoke tactfully but earnestly regarding the fact that, almost without exception, the proponents that testified for Champlain Wind/First Wind (the petitioner) have already garnered significant financial gains from the developer with the Stetson I & II projects, OR stand to have significant financial gains from the Bowers/Kossuth project. At least a half a dozen proponents who submitted testimony are tied directly to the landholders who will gain handsomely from the project leases. The proponents have EVERYTHING TO GAIN (financially) and NOTHING TO LOSE.

On the other hand, those of us who oppose the project have ABSOLUTELY NOTHING to gain, but much to LOSE in the form of property devaluation; lost business to the lodges and guides from a projected significant downturn in clientele (who can find 100 places to fish that are a lot closer to home but choose to come to this watershed from around the world to enjoy it's unspoiled beauty and wild lands setting); and the most significant loss of all to those who chose to live around this watershed, the loss of it's natural unspoiled beauty which would be a devastating and permanent loss.

I know that you have to be objective in evaluating all the testimony no matter which side of the fight they're on, but I would ask you to seriously consider the relative objectiveness of those who testified. It's clearly a case of "the almighty buck" vs. quality of place and life. Yes, any new business in this area is typically welcomed, but ruining the "Quality of Place" of an entire culturally, historically, and recreationally significant watershed for just short term financial gains during the construction phase of this project does not provide a rational cost to benefit ratio. I strongly urge you to vote "No" on the petition to expand the expedited zoning in Kossuth.

Thank you in advance for your consideration.

Kevin Gurall and Family Junior Lake Lakeville, Maine

Your message is ready to be sent with the following file or link attachments: Fwd Rebuttal Comments Champlain Wind Kossuth

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

Jackson, Ellen

From:Horn-Olsen, SamanthaSent:Tuesday, October 12, 2010 4:47 PMTo:Todd, FredSubject:FW: Rebuttal Comments: Champlain Wind / Kossuth

From: Gary Campbell [mailto:garycam99@verizon.net]
Sent: Tuesday, October 12, 2010 4:36 PM
To: Horn-Olsen, Samantha
Subject: Rebuttal Comments: Champlain Wind / Kossuth

Ms. Samantha Horn-Olsen Harlow Building 22 State House Station Augusta, ME 04333-0022

12 October 2010

Re: Rebuttal to comments received regarding Champlain Wind LLC's petition to add Kossuth to the expedited permitting area

Dear Ms. Horn-Olsen,

I have read all the comments your office received about the above-mentioned petition and have two observations I'd like to share with the Commissioners. I'll leave it to others to provide detailed rebuttals; my observations are more general in nature, but relevant nonetheless. First of all, I made a tally of the sentiments expressed in the comments. There were two comments that I wouldn't classify as either for or against the petition. They were provided by D.

Gordon Mott (Lakeville resident and Forester) and Elbridge Cleaves (1st Settler's Lodge). By my count there were 47 respondents who were firmly against the Commission approving this petition. They included local year-round residents, seasonal residents, occasional visitors (tourists), sporting camp owners, real estate professionals, small business owners, a carpenter, town selectmen, registered guides and authors.

In contrast, there are only 25 respondents who are urging the Commission to approve the petition. Here's a brief look at who they are:

Rene Crone (owns the Mill Yard Convenience Store and hopes to cash in)

Dana Morrison (representing East Grand School which received a donation from First Wind)

Dave Conley (also representing East Grand School which received a donation from First Wind)

Barry Gillis (Danforth Selectman, town benefited from Stetson I project)

Commissioner of Washington County (Betsy Fitzgerald, she wrote twice. It's her job to promote projects.)

Philip L. Bartlett, II (Senate Majority Speaker, member of Governor's Task Force on Wind)

Stacey A. Fitts (State Rep, member of Governor's Task Force on Wind)

Kevin O'Brien (Pres. of Quad County Snowmobile Club which received donation from First Wind.

He also works for H.C.Haynes, owner of the Kossuth land in question)

Elgin Turner (Employee of H.C.Haynes, owner of the Kossuth land in question)

Harold Clossey (Director Sunrise County Economic Council. It's his job to promote projects.)

Baskahegan Company (leasing land to First Wind for the Bowers project)

Steve Blaisdell (Maine Drilling & Blasting, a subcontractor on First Wind projects)

Michael Lane (Lakeville Shores/H.C. Haynes attorney, paid to promote projects)

Bob Jacobs (Co-owns Mill Stream Grocery and hopes to cash in)

Deborah Jacobs (Co-owns Mill Stream Grocery and hopes to cash in)

Finally we have the cozy threesome of the Appalachian Mountain Club, Maine Audubon and NRCM. It's appropriate that these three all signed a single letter. You see it was First Wind's attorney, Juliet Browne, who brokered the recent deal between TransCanada, the Appalachian Mountain Club, Maine Audubon and NRCM to drop their objections to development of Kibby Mountain for \$500,000. Also, in the case of Maine Audubon, one of First Wind's executives was recently appointed to their advisory board.

I guess if I were a LURC Commissioner, I'd ask myself: Whose opinion is more in keeping with LURC's values and principals?

Would it be the 47 hard-working, tax-paying citizens who volunteer their time to speak from the heart, struggling to make their voices heard on behalf of a vanishing lifestyle?

Or is it the 25 individuals and organizations who speak from their wallets to secure a substantial financial interest in seeing that this petition is approved?

I think the contrast is dramatic and the choice is obvious.

Please, enough is enough! Tell Champlain Wind that they'll have to give up their dream of destroying Kossuth.

Thank you for your time and attention.

Sincerely, Gary Campbell Lakeville, ME