

**STATE OF MAINE
DEPARTMENT OF CONSERVATION
LAND USE REGULATION COMMISSION
IN THE MATTER OF**

TRANSCANADA MAINE WIND DEVELOPMENT INC.)	POST HEARING BRIEF
)	SUBMITTED BY THE
)	CONSOLIDATED PARTIES
KIBBY EXPANSION WIND POWER PROJECT, DP4860)	(MAINE AUDUBON, THE
)	NATURAL RESOURCES
)	COUNCIL OF MAINE, AND
KIBBY AND CHAIN OF PONDS TWPS. FRANKLIN COUNTY)	THE APPALACHIAN MOUNTAIN CLUB)

I. Introduction

If TransCanada’s application for the Kibby Expansion Wind Power Project is approved as proposed, the project would cause undue adverse impacts to several high-priority resource values. It therefore fails to meet the criteria for approval set forth in 12 M.R.S.A. §685-B.4.C, 35-A MRSA §3452, and LURC Land Use Districts and Standards Chapter 10.24. Specifically, the construction of the southern seven turbines in the project area and their associated roads would cause undue adverse effects¹ to breeding Bicknell’s thrush (*Catharus bicknelli*), a species endemic to the northeast and one of the highest conservation priorities for the region, and to a documented and ecologically significant occurrence of a rare natural community type. It would also cause an unreasonable

¹ “Adequate provision has been made for fitting the proposal harmoniously into the existing natural environment in order to assure there will be no undue adverse effect on existing uses, scenic character, and natural and historic resources in the area likely to be affected by the proposal.” 12 M.R.S.A. §685-B(2)(C).

adverse impact² to the character of outstanding scenic resources of both state and national significance.

II. Smaller Project of the 8 Northern Turbines Meets the Legal Criteria

A. Northern 8 Turbines Would Not Cause Undue Adverse Effect

The project area consists of two ecologically distinct parts – the northern area (containing Turbines 1 through 8) and the southern area (containing turbines 9 through 15). Consistent with our support of other wind power development projects in Maine, we support the construction of the eight turbines and their associated roads in the northern portion of this project area.

Turbines 1 through 7 and the associated access roads lie entirely outside of the mapped extent of the rare Fir-Heartleaved Birch Subalpine Forest Natural community.³ Turbine 8 and its associated road lie within the community, but impact only a small area at the northern tip of it. The impact of Turbine 8 on the community can legitimately be described as “minimal” and is therefore not undue.

This northern part of the project area is located outside of high-quality Bicknell’s thrush habitat, is not now in use by Bicknell’s nor is it likely potential habitat in the future.⁴ Therefore, concern over both habitat loss and risk of collisions with turbines is minimal.

² “In making findings regarding the effect of an expedited wind energy development on scenic character and existing uses related to scenic character pursuant to Title 12, section 685-B, subsection 4 or Title 38, section 484, subsection 3 or section 480-D, the primary siting authority shall determine, in the manner provided in subsection 3, whether the development significantly compromises views from a scenic resource of state or national significance such that the development has an unreasonable adverse effect on the scenic character or existing uses related to scenic character of the scenic resource of state or national significance.” 35-A M.R.S.A. §3452(1).

³ Testimony of W. Donald Hudson, April 21, 2010, Exhibit B; See also Testimony of David Publicover, April 21, 2010.

⁴ See Testimony of Susan M. Gallo, April 21, 2010.

Scenic impacts from the northern eight turbines meet the standards⁵ and would be significantly reduced in comparison to the project as proposed. The entire project would be visible along 31% of the length of Chain of Ponds, while the northern eight turbines would only be visible from about 10% of the distance along the Ponds. Thus, in two-thirds of the area where the 15 turbine project would be visible, no turbines at all would be visible were only the northern eight turbines built. Along the 10% of the Ponds where the eight northern turbines would still be visible, the viewer would see only about half as many turbines and they would be further away.⁶ In addition, visibility of access roads to the northern eight turbines would be minimal or non-existent. Removing the southern seven turbines would significantly decrease, although not eliminate altogether, the adverse impacts of the project on the Chain of Ponds, including the Public Lands Unit and the Arnold Trail.

B. Need for Conditions to Mitigate Adverse Impact of Smaller Project

1. Scenic Impacts Would be Adverse

The northern eight turbines would have adverse impacts on scenic resources of state or national significance. However, while those adverse impacts do not rise to the level of being “undue,” they are, nonetheless, significant. Any permit granted should require conditions to mitigate for those adverse impacts. The northern eight turbines would be visible from Arnold and Crosby Ponds and Kibby Stream, as well as from Chain of Ponds, the Chain of Ponds Public Lands Unit, and the Arnold Trail. This is a large number of resources that would be impacted, and there are a similarly large number of users of these resources that would be impacted. All of the ponds that would be

⁵ See Testimony of Catherine B. Johnson, April 21, 2010.

⁶ Testimony, Johnson, p.7 and Attachment C1 and C2.

impacted are designated “outstanding”- the highest available rating - for scenic character. To avoid incremental degradation of these very high value scenic resources of state or national significance and related uses, the Applicant should be required to provide benefits to scenic resources to compensate for that degradation.

While we acknowledge that there is currently no accepted methodology for determining the appropriate conditions to mitigate for scenic impact, we suggest that a fund in the amount of \$100,000 be made available to the Bureau of Parks and Lands.⁷

2. *Migratory Bird and Bat Impacts Would Be Adverse*

If a smaller project consisting of the northern eight turbines is approved, there is a need to incorporate conditions to mitigate for adverse impacts to migratory birds and bats (in addition to conditions to mitigate for adverse scenic impacts) into the approval.

As discussed in Susan Gallo’s pre-filed testimony, a relatively high number of bird and bat targets would be expected to pass through the rotor swept area during fall migration.⁸ Even though the passage rate is only moderate, the average flight height is one of the lowest recorded in the northeast for forested ridges resulting in an overall high number of targets passing through the rotor swept area each hour.⁹ Though these passage rates may not rise to the level of creating an undue adverse impact, the low altitude of flights over the project area is a concern in terms of the potential for direct mortality. As a result, rigorous post-construction studies should be required, and should be developed by the Department of Inland Fisheries and Wildlife (DIFW) in consultation with the U.S. Fish and Wildlife Service. Strong adaptive management language addressing turbine

⁷ Testimony, Johnson, p. 11.

⁸ Testimony, Gallo, pp. 14-15.

⁹ Testimony, Gallo, Exhibit D.

operations would also be needed in the event that the post-construction studies find high mortality for either breeding birds or migrating birds and bats.¹⁰

III. Project as Proposed Fails to Meet Standards Requiring No Undue Adverse Impact and No Unreasonable Impact Determination

Although the Applicant has made some modifications to the project to reduce impacts, the proposed project would cause undue adverse impacts to a rare natural community and to high quality Bicknell's thrush habitat and would cause unreasonable impacts to outstanding scenic impacts to resources of state and national significance.

A. **Project Would Cause Undue Adverse Impact on Rare Natural Community With Very Limited Extent Within the State**

1. *The Fir-Heartleaved Birch Subalpine Forest is a rare natural community with very limited extent within the state.*

The Fir-Heartleaved Birch Subalpine Forest is classified as S3 (Rare) by the Maine Natural Areas Program. There are only nineteen documented occurrences in the state encompassing about 40,000 acres, or just 0.2% of the state's area. Of this, 86% occur in just five areas representing the state's largest mountain ranges (Mount Katahdin, the Mahoosuc Range, Bigelow Mountain, Redington/Crocker and Baker/Lily Bay). Outside these areas documented sites range in size from 1400 down to 35 acres.¹¹

2. *The occurrence of this community on Sisk is ecologically significant.*

At 358 acres, the occurrence on Sisk falls within the middle of the size range of documented occurrences outside of the state's largest mountain ranges. It is larger than eight of the nineteen documented occurrences (and more than twice as large as seven of them). The Maine Natural Areas Program assessment rated this occurrence as "Good"

¹⁰ See Testimony, Gallo.

¹¹ Letter from Sarah Demers, Maine Natural Areas Program, to Marcia Spencer Famous dated February 24, 2010; Testimony, Publicover, Attachment A.

and noted its undisturbed and natural condition.¹² It is large enough to support a breeding population of Bicknell's thrush. Contrary to Applicant's assertion, it is not a minor or ecologically insignificant occurrence.

3. *Testimony presented by the Applicant does not diminish the ecological significance of the occurrence of this community on Sisk.*

The Applicant attempts to minimize the significance of this community by suggesting that this community is not particularly rare and that the occurrence on Sisk is not particularly significant. Dr. Hudson's testimony fails to demonstrate this in several ways. First, the fact that this community occurs outside of Maine is irrelevant to these proceedings. Many rare species and communities are more common outside the borders of Maine (including Canada lynx and alpine habitat). However, LURC's responsibility is to the resources within its jurisdiction. There is no legal basis for LURC to minimize its responsibility to protect rare or significant natural resource values because of the presence of these resources outside of the state.

The presence of potential additional undocumented occurrences of this community does not diminish its rarity or the relative significance of the occurrence on Sisk Mountain. Dr. Hudson noted 15 additional areas where this community is likely to occur and estimated that they encompass an additional 8,000 acres.¹³ This brings the total extent of this community to 0.24% - less than a quarter of one percent - of the state, a minor increase that does not in any way diminish the rarity of this community. Dr. Hudson also stated that about half of these occurrences are smaller than the one on Sisk,¹⁴

¹² Demers Letter, p. 1.

¹³ Transcript of May 12, 2010, p. 119. Note that in line 22 the transcript incorrectly says "1,000 acres", though the correct figure is given in line 1 of page 120.

¹⁴ Transcript of May 12, 2010, p. 120.

which does not change the position of Sisk relative to other occurrences. And the inclusion of these potential undocumented occurrences would only increase the number of occurrences to 34¹⁵ – still at the low end of the range of 20-100 occurrences that are part of the standard for classification as an S3 community.

The fact that occurrences of this community in the Boundary Mountains differ in some characteristics from those in Maine’s larger mountains does not diminish their ecological value. Dr. Hudson’s pre-filed testimony described several ways in which occurrences of this community in the Boundary Mountains are different from occurrences in Maine’s larger mountain ranges.¹⁶ However, all communities show some degree of variability across the landscape, and this variability is an important part of the state’s biodiversity. Protecting communities across the full range of their natural variability is an important component of any biodiversity strategy. The somewhat different character of occurrences of this community within the Boundary Mountains makes their conservation more, not less, important.

Applicant’s testimony highlights the fact that other examples of this community have been impacted by timber harvesting.¹⁷ However, this only serves to reinforce the value of the occurrence on Sisk Mountain as an undisturbed and natural (i.e., pristine) example.

While it may be legitimately concluded that very small examples of this community, or ones that have been significantly altered by past timber harvesting or other human activities, are not significant, this is not the case here. The subalpine forest on

¹⁵ Rebuttal Testimony of David Publicover, June 1, 2010, Attachment A.

¹⁶ Testimony, Hudson, pp. 2-4.

¹⁷ Testimony of Peter Vickery, April 21, 2010, Figure 4; Post-hearing testimony of Dana Valleau, May 24, 2010, p. 5.

Sisk Mountain is a good quality example of a rare natural community that has retained an undisturbed and natural condition and provides valuable habitat to one of the state's rarest wildlife species. For LURC to determine that this occurrence is not a significant natural resource worthy of consideration under this criterion would render large parts of the state's biological heritage (not only this community, but other rare natural communities as well) essentially invisible to the regulatory process. LURC clearly does not take such an approach for other important natural resources within the jurisdiction (such as deeryards, wetlands, or riparian areas), and it should not treat rare natural communities as any less significant.

4. *The fact of climate change makes conservation of this rare community even more compelling.*

High-elevation subalpine forests are likely to have an important adaptive role in a future warmer climate by maintaining a component of spruce-fir forest on the landscape at a time when this habitat is greatly diminished or eliminated at lower elevations. In his pre-filed testimony Dr. Publicover presented peer-reviewed scientific information¹⁸ establishing: 1) The distribution of high-elevation subalpine forest in the White Mountains has remained stable over the past 9,000 years, despite major long-term shifts in climate that have led to large changes in forest vegetation at lower elevations; 2) Recent changes in various climate measurements on Mount Washington have been much less significant at higher elevations than at lower elevations, consistent with a pattern of greater stability of high-elevation vegetation in the face of a warmer climate; and 3) Areas capable of supporting spruce-fir forests are likely to contract to the mountains of northwestern Maine and northern New Hampshire as the climate warms over the coming

¹⁸ Testimony, Publicover, pp. 6-8; references submitted as Rebuttal Testimony, Publicover, Attachments B, C and D.

century, even under relatively conservative assumptions about the projected increase in atmospheric CO₂. This information shows that high-elevation areas such as Sisk Mountain are likely to be critically important in maintaining spruce-fir habitat on the landscape during a future warmer climate, and would have an important role in allowing species within the state to adapt to this warmer climate. Furthermore, the Applicant presented no evidence that contradicted this testimony. In fact, during cross-examination Dr. Hudson confirmed that this community has persisted for thousands of years in the areas in which it is found.¹⁹

5. *The project would impact a large portion of the mapped occurrence of this natural community.*

Exhibit B of Dr. Hudson's pre-filed testimony indicates that the project would eliminate, fragment or indirectly impact 102 of the 358 acres of this community (nearly 30%). The estimate of indirect impact is based on a buffer around the project footprint of 50 feet. Though this width was also used by Maine Natural Areas Program (MNAP) in their estimate of indirect impacts, under cross-examination Ms. Docherty agreed that this was a minimum estimate, and that the Beginning With Habitat Program (a component of Maine's Comprehensive Wildlife Conservation Strategy) recommends a buffer of 250' around roads and developed areas.²⁰ The project would create over one mile of edge along a steep, high elevation westerly slope exposed to strong prevailing winds and unprotected by any downwind vegetation. These conditions require the use of a wider buffer. If a 250' buffer is used to estimate the area of indirect impact, then the total area

¹⁹ Transcript of May 12, 2010, p. 120.

²⁰ Transcript of May 12, 2010, pp. 321-322.

impacted by the project would increase to about 144 acres, or over 40% of the extent of the community.²¹

In addition, the southernmost turbines and the access road to them would bisect the community into two smaller fragments. In response to MNAP's comments, TransCanada relocated Turbine 11 to avoid some of this type of impact. Under cross-examination Ms. Docherty agreed that the southernmost turbines had a similar impact to that of Turbine 11.²² If the impact of Turbine 11 was considered unacceptable, then the impact of the southernmost turbines and road should be considered unacceptable as well.

The destruction, fragmentation or indirect impact on 40% of the extent of a significant and pristine occurrence of a rare natural community cannot in any way be considered "minimal". During questioning by the Commission, Ms. Docherty stated, "I think there's no question there's an adverse impact," though she left the legal conclusion as to whether this adverse impact should be considered "undue" to the Commission.²³ For LURC to determine that this level of impact to an ecologically significant occurrence of a rare natural community is acceptable would set a very damaging precedent, as it would be a clear statement that large parts of the state's biological heritage are unworthy of protection. Such a position would be in clear contradiction to LURC's legal mandate and the goals and policies of the Comprehensive Land Use Plan.²⁴

²¹ Rebuttal Testimony, Publicover, pp. 3-4.

²² Transcript of May 12, 2010, p. 322.

²³ Transcript of May 12, 2010, p. 291.

²⁴ The 1997 CLUP's goal and both policies pertaining to mountain resources emphasize the protection of their significant values:

- Goal: "Conserve and protect the values of high-mountain areas from undue adverse impacts."
- Policy 13: "Regulate high mountain areas to preserve the natural equilibrium of vegetation, geology, slope, soil and climate, to reduce danger to public health and safety posed by unstable mountain areas, to protect water quality, and to preserve *scenic value, vegetative communities*, and low-impact recreational opportunities." [emphasis added].
- Policy 14: "Identify and protect high mountain resources with particularly high natural resource

6. *TransCanada applied a different standard for protection of this community in this project than it did in the original Kibby project.*

As set forth in Dr. Publicover's pre-filed testimony,²⁵ and confirmed under cross-examination by Ms. Cinnamon of TransCanada,²⁶ the language regarding the environmental protection standard applied to this community is different in the original Kibby application than in the current application. In the original Kibby application the standard was "*to avoid impacts to such areas to the greatest extent possible.*"²⁷ In the current application the standard in one place was "*to avoid and minimize impacts to such areas to the greatest extent possible given engineering and land constraints*"²⁸ and in another place it was to "*minimize[ing] to the maximum extent practicable.*"²⁹

Under cross-examination Ms. Cinnamon indicated that the differences in language simply represented a "clarification", and that the same standard for environmental protection had been applied to both projects.³⁰ However, the plain meaning of the language and the project designs indicate otherwise. As confirmed by Ms. Cinnamon, in the original Kibby project the goal was to avoid impact to this community, and they were successful in doing so.³¹ By contrast, this Kibby Expansion project would have a very substantial impact on this community. TransCanada appears to have lowered the bar in their project development, but this should not influence the Commission's conclusions about undue adverse impacts.

values or sensitivity which are not appropriate for most development." pp. 137-138.

The goals and policies of the 2010 CLUP are similar.

²⁵ Testimony, Publicover, pp. 11-12.

²⁶ Transcript of May 12, 2010, pp. 100-104.

²⁷ Kibby Wind Power Project Application, April 2007, p. 7-1.

²⁸ Kibby Expansion Wind Power Project Application Vol. II, p. B 15-1.

²⁹ Kibby Expansion Wind Power Project Application Vol. II, p. B 15-1.

³⁰ Transcript of May 12, 2010, p. 101.

³¹ Transcript of May 12, 2010, pp. 100-101.

B. Project Would Cause Undue Adverse Impact to Bicknell's Thrush – Species Endemic to the Northeast and One of the Highest Conservation Priorities in Region

The southern portion of the project area contains high value breeding Bicknell's thrush habitat that would be unduly adversely impacted if the project is approved. The project would cause direct habitat loss, would degrade additional habitat, and would pose direct mortality risks.

1. *Bicknell's thrush is listed in the state of Maine as a species of special concern and is one of the most rare, range-restricted breeding birds in the Northeast.*

Bicknell's thrush is one of the highest conservation priorities in our region,³² and is listed by multiple conservation organizations and government agencies as a species of highest conservation concern.³³ Our region (including northeastern U.S. and southeastern Canada) is the only place in the world where Bicknell's breed, and within our region, Bicknell's thrush are limited to high elevation, stunted spruce-fir forest. Despite a few isolated observations of these birds in regenerating clearcuts at lower elevations, there is no absolutely no peer-review scientific evidence (despite extensive scientific research and interest in the species) that Bicknell's thrush breed successfully in Maine in this habitat type. Their restriction to high elevation "islands" makes them a top priority for conservation.

³² Susan Gallo testified, "Multiple conservation agencies and organizations from state, national and international groups are in agreement that the Bicknell's thrush is a species of global conservation concern, a very high priority, a species of continental concern facing multiple threats." Transcript of May 12, 2010, p. 183.

³³ Testimony, Gallo, pp. 6-7.

2. *Experts have urged caution to avoid development in high quality Bicknell's habitat.*

Experts have urged caution to avoid development in high quality Bicknell's habitat.³⁴ In fact, even TransCanada's own expert witness agreed that Dr. Chris Rimmer, who Dr. Vickery identified as being someone that he highly respects and is "very knowledgeable"³⁵ in the field, says that not just current Bicknell's breeding habitat should be avoided but also "those areas [potential suitable habitat] should be avoided" and Dr. Vickery agreed that this approach "would be preferable."³⁶

3. *The proposed project would cause undue adverse impact by causing direct habitat loss.*

The proposed project would cause undue adverse impact because it would result in the direct loss of habitat. The Applicant has significantly underestimated the amount of habitat loss by asserting that there would be "only" eight acres of direct habitat loss. First, eight acres of direct breeding habitat loss constitutes an undue adverse impact. Second, the amount of direct habitat lost would be more than eight acres. The Applicant utilized a highly dubious "connect-the-dot" approach to identify "core" habitat which in turn led to a significant underestimate of the amount of habitat potentially impacted by the project. Search areas for spot-mapping efforts were limited to 10 ha plots around each of six point count locations, so there is no information about Bicknell's thrush use of habitat beyond these plots. The Applicant made questionable assumptions about Bicknell's thrush observations on the edges of the search areas. As illustrated by Susan

³⁴ Dr. Vickery agreed under oath that Dr. Rimmer is a highly respected expert on Bicknell's thrush and was not surprised to hear that Rimmer's Bicknell's thrush conservation strategy says, "Habitat alterations should be avoided in areas where natural disturbances, either chronic or random, could maintain suitable habitat for Bicknell's thrushes, such area areas including west facing slopes, ridge lines for waves and areas adjacent to waves." Transcript of May 12, 2010, pp. 113-114.

³⁵ Transcript of May 12, 2010, p. 113.

³⁶ Transcript of May 12, 2010, p. 114.

Gallo's testimony at the hearing,³⁷ if the Applicant's assumptions are wrong and any Bicknell's thrush observed actually uses habitat beyond the area searched (that is, the point of observation falls closer to the middle or inner edge of that birds territory), then the impact to the Bicknell's territory would be significantly greater. As Susan Gallo testified, "Where this bird's territory falls relative to the point where it was observed changes the amount of habitat impacted by this project."³⁸

In limiting their direct habitat loss estimate to eight acres, TransCanada is also ignoring the fundamental ecological fact that Bicknell's thrush habitat is dynamic, moving across the available suitable natural community type, over time as new disturbances like blow downs and ice damage create gaps in the forest for new growth. A realistic interpretation of the full ecological impact of this project over its lifetime must take into consideration the direct loss of additional habitat from the full project footprint in potential habitat that is adjacent to what is now current, high-quality habitat for breeding Bicknell's thrush, and the Applicant has failed to do this.

4. *Applicant has significantly underestimated number of Bicknell's thrush displaced by the project.*

The Applicant also significantly misrepresents the number of birds impacted by the habitat lost. The Applicant asserts that "only" one Bicknell's thrush would be impacted because "only" eight acres of habitat would be lost. However, if one examines the layout of the direct habitat loss, it's clear that this is grossly inaccurate. Bicknell's thrush defend one patch of ground for their territory, not disjunct patches in multiple places on the landscape. To equate the eight acres lost in three different areas of the project to one Bicknell's thrush territory is ecologically unsound. Rather, we know the

³⁷ Transcript of May 12, 2010, pp. 182-188 and Consolidated Parties Exhibit 1 (Gallo PowerPoint).

³⁸ Transcript of May 12, 2010, p. 186.

habitat impact would be on multiple Bicknell's thrush territories. Given the gross underestimate of the actual direct habitat loss in the first place, the number of impacted Bicknell's would be more along the lines of three to eight.³⁹

5. *Applicant has completely ignored habitat degradation due to edge effects.*

The Applicant has completely ignored the habitat degradation that would occur due to edge effects in its application. Dana Valleau admitted under cross examination that the Applicant's estimate of habitat degradation only includes the direct project footprint⁴⁰ and that the Applicant has failed to provide an estimate of the total habitat degradation as a result of the project.⁴¹ There would be changes to the habitat beyond the project footprint that would result in indirect habitat loss. Dana Valleau also admitted on cross examination that the habitat directly adjacent to the clearings would change; the light levels would be higher, moisture levels would be lower.⁴² Such disturbance would be much different and much more dramatic than that caused by a logging road or by a natural disturbance.⁴³ By failing to acknowledge the well-studied and well-documented impacts from edge effects, the Applicant grossly underestimates the amount of lost and degraded habitat.

6. *Applicant has significantly overestimated the amount of available potential habitat.*

The Applicant grossly overestimates the amount of potential Bicknell's thrush habitat available on the landscape. Dr. Vickery asserts that there may be as much as

³⁹ Transcript of May 12, 2010, p. 205.

⁴⁰ Transcript of May 12, 2010, p. 107.

⁴¹ Transcript of May 12, 2010, p. 108.

⁴² Transcript of May 12, 2010, p. 108.

⁴³ Transcript of May 12, 2010, p. 187.

98,000 acres of additional available habitat in Maine.⁴⁴ However, he failed to mention either in his pre-filed testimony or in his direct summary that the study he based this assertion on specifically advises using caution in the application of the model in areas north of 45 degrees latitude.⁴⁵ Dr. Vickery failed to determine whether the project area is north of 45 degrees latitude.⁴⁶ Also, Dr. Vickery bases his assertion on studies conducted in Canada where Bicknell's thrush are known to breed at lower elevations.⁴⁷ In addition, he asserts that Bicknell's thrush have been discovered breeding in regenerating clearcuts in Maine. However, he admitted under cross examination that there has been no documentation of Bicknell's thrush breeding successfully in Maine in regenerating clearcuts.⁴⁸ Despite this fantastic discovery that tens upon tens of thousands of potential habitat could be available for this bird of highest conservation value, Dr. Vickery admitted that experts such as the Vermont Center for EcoStudies have not initiated studies in these areas.⁴⁹ In fact, as Dr. Vickery admitted under oath, only a portion of the 98,000 acres could be available as potential under his scenario.⁵⁰

Last, Dr. Vickery and Dana Valleau (in his post hearing comments) base much of their claim about potential habitat on one observation of a Bicknell's thrush in a clearcut in the western mountains. To use only one observation to justify classifying 90,000+ acres as potential habitat is ecologically unsound and misleading. Even if some of this area described by Dr. Vickery is potential habitat, it is likely that regenerating clearcuts

⁴⁴ Testimony, Vickery, p. 4.

⁴⁵ Lambert et. al, 2005, p. 9.

⁴⁶ Transcript of May 12, 2010, p. 112.

⁴⁷ Transcript of May 12, 2010, p. 113.

⁴⁸ Transcript of May 12, 2010, p. 111.

⁴⁹ Transcript of May 12, 2010, p. 114.

⁵⁰ Transcript of May 12, 2010, p. 113.

would provide lower quality habitat compared to naturally disturbed forests.⁵¹ Lower quality habitat often attracts singing males with little or no chance of successful breeding.⁵²

7. *Applicant errs in dismissing the significance of the “species of special concern” designation implying we do not need to protect Bicknell’s thrush.*

The Applicant errs in dismissing the importance of protecting species of special concern thereby implying Bicknell’s thrush are not worthy of protection. Species of special concern are, by definition, on the cusp of becoming a listed species.⁵³ This designation is a red flag that the species is at risk and, if appropriate measures are not taken, we may soon find the species facing extinction. Furthermore, it is in developers’ best interest to avoid having a species listed. Once a listing occurs, generally speaking, the regulatory burdens and expense necessary to comply with the burdens increase significantly.⁵⁴ As indicated in Susan Gallo’s pre-filed testimony,⁵⁵ DIFW’s own Comprehensive Wildlife Conservation Strategy identifies Bicknell’s thrush as “one of only 12 bird species of very high priority on their list of Species of Greatest Conservation Needs, indicating a high potential for state extirpation without management intervention and/or protection.”⁵⁶ Certainly a regionally endemic habitat specialist like Bicknell’s thrush warrants conservation effort, as its Special Concern listing indicates.

⁵¹ Rebuttal Testimony of Susan M. Gallo, June 1, 2010, p. 1.

⁵² Rebuttal Testimony, Gallo, p. 1.

⁵³ Rebuttal Testimony, Gallo, p. 4.

⁵⁴ Transcript of May 12, 2010, p. 197.

⁵⁵ Testimony, Gallo, p. 6.

⁵⁶ Testimony, Gallo, p. 6.

8. *Applicant is grossly misleading in regard to the risk of collision of Bicknell's thrush with the turbine blades.*

The Applicant is grossly misleading in regard to the risk of collision of Bicknell's thrush with the turbine blades. Dr. Vickery asserts that "it is *unlikely* the males will interact with the turbine blades because the flight displays are *usually* beneath the heights of the blade."⁵⁷ Dr. Vickery provides no documentation to support his conclusion. As discussed and confirmed by Dr. Vickery at the public hearing, the species account in *Birds of North America*, Rimmer et al., 2002,⁵⁸ indicates flight songs typically consist of 10 to 15 second flights, 25 to 75 meters (82 to 246 feet) above the ground often in large circles.⁵⁹ If the turbine blades are 119 feet and higher off the ground, it is far from unlikely that the displaying males would fly into the rotor swept area. Even if we rely on Dr. Vickery's account of a personal conversation with Rimmer that the birds don't fly higher than 150 feet above the ground, there is still considerable opportunity for collision with the turbine blades. During their breeding display, the males circle around within the rotor swept area (approximately in circles as large as 100 meters)⁶⁰ and would have more than an "unlikely" opportunity to be killed by the rotating turbine blades. In fact, we aver that there would be an undue adverse impact on the Bicknell's thrush due to risk of direct mortality.

⁵⁷ Testimony, Vickery, p. 10, emphasis added.

⁵⁸ Testimony, Gallo, p. 4.

⁵⁹ Transcript of May 12, 2010, p. 115.

⁶⁰ Transcript of May 12, 2010, ,p. 116.

C. Southern Seven Turbines Would Have an Unreasonable Adverse Impact on Scenic Resources and Related Uses of State or National Significance

1. *Outstanding scenic resources in a region recognized for its outstanding scenic beauty would be unduly adversely affected.*⁶¹

Seven lakes and ponds rated “outstanding” for their scenic beauty by the Wildlands Lake Assessment would be unreasonably adversely impacted by the proposed turbines. Five of these ponds make up the Chain of Ponds. The Chain of Ponds lakes and ponds are outstanding in their own right; they also constitute the heart of the Chain of Ponds Public Reserved Land Unit. The Chain of Ponds lakes and ponds, as well as Arnold Pond, are also the route traveled by the Arnold expedition and thus constitute the actual physical location of the Arnold Trail.

The Bureau of Parks and Lands Management Plan for the Chain of Ponds was developed in 2007 by Kathy Eickenberg, Chief of Planning for the Bureau.⁶² While John Titus, Transcanada’s witness, suggested that he was responsible for the development of the plan, Eickenberg’s comments are clear that Titus did nothing more, prior to being transferred to other work in the Bureau, than prepare a Preliminary Plan which included no vision, no analysis of issues, and no management recommendations. The assertions by Titus that the Chain of Ponds Unit was to be managed for intensive, motorized uses⁶³ are simply not accurate and are not supported by the clear language of the plan.

⁶¹ 12 M.R.S.A. §685-B.4.C. lists the standard for evaluating scenic impacts as no “undue” adverse effect. The same section further states that “the commission shall consider the development’s effects on scenic character and existing uses related to scenic character in accordance with Title 35-A, section 3452.” Title 35-A M.R.S.A. §3452 lists the standard for evaluation of scenic impacts as no “unreasonable” adverse effect. For purposes of this proceeding, we do not believe there is any significant difference between “undue” adverse effect and “unreasonable” adverse effect. In this proceeding, we use the terms interchangeably.

⁶² Comments by Maine Bureau of Parks and Lands (BPL), Kathy Eickenberg, Chief of Planning, BP&L, May 12, 2010, p. 1.

⁶³ Testimony of John Titus, April 20, 2010, pp 6, 7, 11.

Eickenberg completed the plan in 2007. She notes that the plan describes the area as a “highly scenic 1,041-acre parcel.”⁶⁴ She quotes the plan, stating that the draw of the area for most recreationists is its “wild and scenic” character.⁶⁵ She notes that the “Vision and Management Policies for the Flagstaff Region [BPL Plan] (p. 113) begins: ‘The Bureau lands are signature landscapes that draw visitors to the Region in search of a remote recreation experience’ ...and speaks specifically of camping on the sandy beaches of Chain of Ponds; and ends ‘A regional network of ATV trails is enriched by opportunities for touring and camping in remote settings.’”⁶⁶

The Chain of Ponds region is central to the Arnold Trail experience. Alan Stearns, Deputy Director of the Bureau of Parks and Lands (BPL) stated: “the historic significance of the trail, especially in the study area, is precisely the vast wilderness military march with no structures....”⁶⁷

Kirk Mahoney, Deputy State Historic Preservation Officer concludes in his evaluation of the significance of the Chain of Ponds region: “the physical environment of the Arnold Trail, comprised of mountains, bodies of water and forested landscapes, are among the more important aspects of integrity that the site possesses.”⁶⁸ Mahoney goes on to state: “We conclude that the location, number, operational characteristics, and scale of the proposed wind turbines will substantially change the wilderness character of the Arnold Trail’s ‘physical features within the property’s setting that contribute to its historic significance...’ and will introduce visual elements that ‘diminish the integrity of

⁶⁴ BPL Plan, p. 92.

⁶⁵ BPL Plan, p. 31.

⁶⁶ Comments by BPL, Eickenberg, p. 1.

⁶⁷ Comments by Bureau of Parks and Lands, Alan Stearns, Deputy Director, February 26, 2010, p.3-4.

⁶⁸ Letter from Maine Historic Preservation Commission (MHPC), Kirk F. Mahoney, Deputy State Historic Preservation Officer, May 6, 2010, p. 2.

the property’s significant historic features.”⁶⁹ Mahoney concludes his letter stating: “the Commission reaffirms its prior conclusion that the proposed undertaking will have an adverse effect upon this historic property.”⁷⁰

All of these scenic resources of state and national significance are located in the area traversed by the scenic byway, also noted for its “outstanding” scenery, and one of only 12 scenic byways in the state.⁷¹ Therefore, not only are there multiple individual scenic resources of state and national significance, but each of these individually outstanding scenic resources is collectively located in a region that is, itself, noted for its outstanding scenery – that is, outstanding scenic places located in an outstandingly scenic region.

2. *The proposed southern seven turbines would significantly compromise the expectations of users and visitors in the region, who expect to see undeveloped natural beauty.*

Users of the scenic resources of state or national significance and visitors to the region include paddlers, anglers and campers on the Chain of Ponds, ATV riders looking for opportunities for touring and camping in remote settings, history lovers following the Arnold Trail, and tourists exploring the scenic byway.⁷² All of these users expect a beautiful, natural undeveloped area, including lakes and ponds, mountains, and forested landscapes.

⁶⁹ Letter, MHPC, Mahoney, p. 3.

⁷⁰ Letter, MHPC, Mahoney, p. 3.

⁷¹ During the hearing, Palmer suggested that only the scenic pullouts on the scenic byway should be considered. While it is accurate that the law specifies only the pull outs on a scenic bylaw as “resources of state or national significance,” it is also true that the law (35-A M.R.S.A. §3452(3) includes as one of the evaluation criteria: “The existing character of the surrounding area.” The scenic byway and its adjacent, natural, undeveloped forested landscapes is part of the “existing character of the surrounding area” LURC is charged to consider.

⁷² See Bureau of Parks and Lands Flagstaff Region Management Plan, p. 31, 92, 95-100, 113, Letter from Maine Historic Preservation Commission, May 6, 2010, Testimony, Johnson, p. 8.

Users of Long and Bag Ponds, in particular, would expect a remote-feeling area. From these two ponds, the public road is not visible. On these two ponds, BPL maintains multiple primitive campsites. Transcanada's witness John Titus, noted that these primitive campsites "receive significant use during the spring and fall fishing seasons."⁷³ The Bureau of Parks and Lands notes, as one of only four management issues related to recreation and visual resources for the Chain of Ponds Unit, that additional primitive campsites may be appropriate.⁷⁴ Clearly this is a popular and well used area for primitive camping, paddling and angling.

A second recreation and visual management issue to be addressed by BPL on the Chain of Ponds Unit is to work with the existing commercial campground lessee to ensure that the campground "is in character with the scenic and primitive nature of the surroundings...."⁷⁵

3. *The proposed seven southern turbines and associated roads would unreasonably adversely affect the scenic resources and related uses.*

James Palmer, LURC's scenic consultant, stated that from Viewpoint 5 on the southern end of Long Pond the turbines (up to 14 turbines) would be "most certainly 'prominent' by any definition, and may be considered collectively dominant." He also stated that it was "reasonable to assert that the turbines visible from Viewpoints 4 and 6 are also 'prominent.'" He also noted that "some would also consider the turbines...from Viewpoints 1 and 3 as "prominent."⁷⁶

⁷³ Testimony of John Titus, April 20, 2010, p. 10.

⁷⁴ BPL Management Plan, p. 100.

⁷⁵ BPL Management Plan, p. 100.

⁷⁶ Review of the Kibby Expansion Wind Project Aesthetic Impact Assessment, James F. Palmer, April 16, 2010, p. 8.

The prominence of these turbines from Chain of Ponds would significantly compromise the scenic character and recreational experience in these ponds. As you sit in a canoe and look east, they would stretch across the view in front of you. The remote-feeling experience and the sense of Arnold's wilderness expedition on these ponds would be lost.

The turbines would not be the only man-made visible feature resulting from this proposed project. The road connecting the seven southern turbines would be located on the western side of the ridge, fully visible in multiple places along a one mile distance to users in the Chain of Ponds. The road would run across 30 - 45% slopes. With slopes this steep, significant blasting of the bedrock would occur above the road level, and significant areas of fill would be below road level. Neither blasted bedrock nor fill areas consisting of the blasted bedrock can be re-vegetated. Therefore, these scars across the steep slope would be permanently visible from Chain of Ponds.

During the hearing, Palmer suggested that the Kibby Expansion project might be an example of "concentrating" wind power projects in certain areas in order to limit their adverse impacts on scenic resources. However, he also acknowledged that this region had never been identified as an area where wind should be concentrated, and that simply identifying an area by virtue of multiple incremental decisions was not the best way. In fact, the impacts on ecological and scenic resources resulting from the southern seven turbines of the proposed Sisk Mountain project are significantly greater than those from the existing Kibby project, and lead to the conclusion that the southern end of Sisk Mountain is not an appropriate area for wind development, notwithstanding the fact that it is relatively near the Kibby project.

IV. Conclusion – Project Fails to Meet Legal Criteria

The Applicant has failed to meet its burden⁷⁷ of establishing no undue adverse effect on existing natural resources and no unreasonable or undue adverse effect on scenic character and related uses.

The rare natural community, the Fir-Heartleaved Birch Subalpine Forest, found in the southern portion of the project area is very limited in the state and would suffer undue adverse impact if the project is approved. The Sisk community is ecologically significant. The subalpine forest on Sisk Mountain is a good quality example of a rare natural community that has retained an undisturbed and natural condition and provides valuable habitat to one of the state's rarest wildlife species. For LURC to determine that this occurrence is not sufficiently significant to be worthy of protection under the legal standard would render large parts of the state's biological heritage essentially invisible to the regulatory process.

Despite the lack of adequate information provided in the application, it is clear that the southern portion of the project area comprises breeding Bicknell's thrush habitat. Such habitat is severely limited and Bicknell's thrush is one of the most rare, range-restricted breeding birds in the Northeast and ranks high on the region's conservation priority list. Experts recommend avoiding development in areas such as this with high quality Bicknell's habitat. Locating turbines and their accompanying roads within and adjacent to this habitat would cause direct loss of this habitat, degrade additional habitat, and result in direct mortality to singing males, therefore comprising a significant undue adverse impact.

⁷⁷ "The burden is upon the Applicant to demonstrate by substantial evidence that the criteria for approval are satisfied, and that the public's health, safety and general welfare will be adequately protected." 12 M.R.S.A. §685-B(2)(4).

The southern seven turbines would have an unreasonable adverse impact on the scenic resources and related uses of state or national significance. This region is recognized for its outstanding scenic beauty and possesses multiple individual scenic resources of state and national significance. The southern seven turbines would significantly compromise the expectations of users and visitors in the region, who expect to see undeveloped natural beauty. The turbines and associated road would be prominent, dominant and permanent – forever scarring the scenic beauty of the region.

Each of these impacts considered individually would provide sufficient basis to deny the application. In combination, they clearly indicate that the southern portion of the Sisk ridgeline is a “high-mountain resource with particularly high natural resource values or sensitivity which is not appropriate for most development.”

However, the legal standards are met if the project is limited to the eight turbines in the ecologically different northern part of the project area. There are no large blocks of identified unique community type or high quality Bicknell’s thrush habitat. The scenic impacts are significantly reduced in an eight northern turbine only project. Conditions to mitigate for adverse scenic impacts and potential adverse migratory birds and bats impacts would be necessary.

The Applicant has failed to meet its burden of proof and has failed to meet the legal criteria. The southern seven turbines and associated road would cause undue adverse impact to a large block of rare natural community and to breeding Bicknell’s thrush, a species of special concern, and would cause an unreasonable adverse impact to the character of scenic resources of state and national significance and related uses.

June 8, 2010