

**STATE OF MAINE
LAND USE REGULATION COMMISSION**

IN THE MATTER OF DP 4860

<i>In Re:</i> TransCanada’s Kibby Expansion Wind Project]]]]]]	Friends of the Boundary Mountains’ POST-HEARING BRIEF
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The Friends of the Boundary Mountains (hereafter “FBM”) respectfully submits the following closing brief in opposition to TransCanada’s Kibby expansion project.

Introduction

TransCanada has applied to this Commission for a permit to expand its Kibby I wind development project by adding fifteen new turbines similar to the ones on Kibby I, with an additional 138.6 acres of clearing (55 of which will be permanent), 177.9 acres affected by construction, 1.1 miles of new roads, 2.2 miles of expanded roads, 3.6 miles of crane access roads, 8.9 miles of collector lines, 4.4 acres wetlands impacted by the construction, and 3.5 acres of permanently cleared wetlands (not including the filled wetlands). See Application, Table I-1 Kibby Expansion Project Key Facts. The entire project is in the expedited wind area.

The Commission held hearings on the application on May 11, 2010 and May 12, 2010.

The record closed on May 31, 2010.

FBM is a grassroots organization formed to safeguard the Boundary Mountains from development and to conserve the area for wildlife habitat and the traditional uses of recreation and sustainable forestry. The organization's primary goal is to protect the mountainous landscape of the Boundary Mountains. The group has been in existence for 15 years, having initially been formed to oppose the Kenetech Windpower Project. In addition to evaluating the impact of windpower projects on the Boundary Mountains, FBM has produced a comprehensive conservation plan for the area, published a brochure to promote the recreational enjoyment of the area, organized hikes and workshops, and sponsored a mountain conference in 2006 attended by students, activists, journalists, writers, poets, politicians, governmental officials and members of the public.

The purpose of this closing brief is to persuade the Commission to deny the application on the grounds that the proposed project fails to conform to the applicable statutory and regulatory criteria. After discussing the proper “standard of review,” the applicable statutory and regulatory criteria, this brief will direct the Commission’s attention to those parts of the administrative record that compel a **DENIAL** of the application.

Standard of Review

The burden of proof in this proceeding is entirely on TransCanada: “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 (4). FBM has no burden to prove anything; if the project fails to conform to

even a single review criteria, the Commission must, as a matter of law, deny the application.

Amongst other statutory and regulatory criteria, TransCanada must (with the exception of scenic characteristics modified by 35-A MRSA § 3452, which is discussed below) demonstrate that:

Adequate provision has been made for fitting the proposal harmoniously into the existing natural environment in order to ensure 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 (4)(C).

Obviously concerned that any given wind project will be “... a highly visible feature of the landscape...” that has the potential to create “an unreasonable adverse effect on the scenic character or existing uses related to the scenic character of that resource” 35-A MRSA § 3402 (2)(C), the Legislature adopted the Expedited Permitting of Grid-Scale Wind Energy Development Act (hereafter “Expedited Wind Statute”), 35-A MRSA § 3451 *et seq.* That statute has a more precise and rigorous standard for determining undue adverse impacts on scenic characteristics than contained in the more general 12 MRSA § 685-B (4)(C) criteria. 35-A MRSA § 3452 (1) directs this Commission to determine “... 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...” *id.* In making this determination, the statute requires the Commission to consider:

- A. The significance of the potentially affected scenic resource of state or national significance;
- B. The existing character of the surrounding area;

C. The expectations of the typical viewer;

D. The expedited wind energy development's purpose and the context of the proposed activity;

E. The extent, nature and duration of potentially affected public uses of the scenic resource of state or national significance and the potential effect of the generating facilities' presence on the public's continued use and enjoyment of the scenic resource of state or national significance; and

F. The scope and scale of the potential effect on views of the generating facilities on the scenic resource of state or national significance, including but not limited to issues related to the number and extent of turbines visible from the scenic resource of state or national significance, the distance from the scenic resource of state or national significance and the effect of prominent features of the development on the landscape.

35-A M.R.S.A. § 3452

This aspect of the Expedited Wind Statute *only* affects review of **scenic** impacts; the traditional “harmonious fit” criteria in 12 MRSA § 685-B (4)(C) “on existing uses, ... natural and historic resources” remains intact.

In a standard that is especially important in high mountain developments, the statute also requires TransCanada to show that, “The proposal will not cause unreasonable soil erosion or reduction in the capacity of the land to absorb and hold water...” 12 M.R.S.A. § 685-B (4)(D). Again, it is TransCanada’s burden to convince the Commission that *all* of the statutory criteria are met.

In addition to the statutory criteria, TransCanada must convince the Commission that the Commission’s regulatory criteria set forth in Chapter 10 and the CLUP are met. The proposed project is located in the following Subdistricts: the General Management Subdistrict (M-GN); the Mountain Area Protection Subdistrict (M-PA); the Shoreland Protection Subdistrict (P-SL2); and the Wetland Protection Subdistricts (P-WL1, P-WL2 and P-WL30). See Exhibit B.3 to

TransCanada's application. In addition to meeting the applicable standards of those Subdistricts, the project must also conform to the pertinent Development Standards in Chapter 10 § 10.25 and the pertinent Specific Activity Standards in Chapter 10 § 10.27.

No discussion of the applicable standard of review would be complete without identifying two significant issues that have arisen in these proceedings that FBM asserts should have no affect on the Commission's review of the merits of this application.

First, TransCanada has raised a timing problem it has in qualifying for stimulus funds under the American Recovery and Reinvestment Act of 2009. In particular, TransCanada has informed the Commission that to qualify for the stimulus, "TransCanada must commence construction in the third quarter of 2010." See page 1, November 9, 2009 letter from Juliet Brown to the Commission. Obviously recognizing the difficulty of squeezing its new project into the existing expedited wind areas, TransCanada initially petitioned the Commission to expand the expedited wind area so it would have room to site the expanded project in conformance with all the applicable environmental standards. However, TransCanada eventually realized that the rulemaking required to expand the expedited area would not be complete in time for TransCanada to get the stimulus. TransCanada therefore decided to squeeze its project into the existing expedited wind areas so it could get a permit in time to qualify for the stimulus. *id.* While one can certainly sympathize with the jam TransCanada has gotten itself into, FBM insists that this sympathy play no part in the review of this application. FBM objects to any consideration of the November 9, 2009 letter, especially those parts suggesting that the Commission is somehow at fault for taking too long in the rulemaking. The letter is irrelevant, prejudicial, and should not have been filed in the first place. The Commission should judge this

application strictly under the statutory and regulatory criteria without any regard to TransCanada's problems in qualifying for the federal stimulus.

Second, the Maine Audubon Society (MAS), the Natural Resources Council of Maine (NRCM) and the Appalachian Mountain Club (AMC) have intervened in the proceeding and promoted a compromise project whereby only about half of the proposed project would be permitted. Although traditional supporters of wind power and Kibby I, these consolidated intervenors have recognized – as they must – the devastating impact the proposed project will have on such significant scenic resources as the Chain of Ponds (especially Long Pond and Bag Pond) as well as other significant resources, such as the Arnold Trail, the rare Fir-Heartleaved Birch Subalpine Forest cover on Sisk Mountain, and habitat for the threatened Bicknell's Thrush.

The problem with their “compromise” approach, however, is two fold: First, even if the compromised project were properly before the Commission, it still fails to meet the applicable standards; and, Second (and most importantly), the compromised project is not properly before the Commission. TransCanada's application is the only application properly before the Commission and TransCanada has consistently rejected the proposed compromise (see, for example, pre-filed testimony of Terry Bennett, Nick Didomenico, and Tom Patterson, page 16). Intervenors have no authority to amend an application without the applicant's consent. While the evidence submitted by these intervenors is probative – and even compelling – that the project *as proposed by TransCanada* cannot meet the applicable standards, their proposed solution of amending the project over the applicant's objection should be ignored. The application, as presented by TransCanada, must be judged on its merits with an “up or down” vote on whether the proposed project conforms to the applicable criteria.

With this standard of review in mind, FBM will now direct the Commission's attention to the evidence in the record that compels a finding that the proposed project does not conform to the required standards.

Argument

I. THE PROPOSED PROJECT WHEN COMBINED WITH THE EXISTING KIBBY PROJECT TIPS THE SCALE INTO MORE DEVELOPMENT THAN CAN FIT HARMONIOUSLY IN THE NATURAL ENVIRONMENT.

In the hope of avoiding the mistake of not being able to “see the forest for the trees,” FBM will begin its argument with a general, holistic observation that the expanded Kibby development cannot fit harmoniously into the natural environment because it will create undue adverse effects on the existing uses, the natural resources, and the historic resources in the area. As will be seen by the arguments that follow, the proposed project – even if viewed in isolation rather than in conjunction with the industrial development already existing in Kibby I – cannot meet the statutory and regulatory standards this Commission must apply. However, the project should not be viewed in such myopic isolation. This Commission has always been sensitive to the problems caused by the cumulative impacts of incremental development. For example, goal #2 in the new 2010 CLUP vows to, “Prevent the degradation of natural and cultural values resulting from cumulative impacts of incremental development.” 2010 CLUP page 8. The identical goal can be found in the 1997 CLUP at page 142. This Commission should not let TransCanada achieve *incrementally* what it could not achieve initially. In other words, the Commission must review the expanded project *as a whole* and ask whether the expanded development can fit harmoniously into the natural environment. As the Commission must surely

remember, the decision in Kibby I was a difficult one because it strained the limits of what the natural environment could accommodate. It is the position of FBM that the industrial development of Sisk Mt., as proposed by TransCanada to expand the Kibby project, will “tip the balance” too far by creating an industrial cluster whose **cumulative** undue adverse impacts cannot meet the applicable standards. TransCanada argues as though the existence of Kibby I makes the expansion project more acceptable because it is a mere expansion of an existing industrial development that can provide some of the infrastructure for the new turbines. The statutory mandate to the Commission, however, is not whether the expansion can fit harmoniously into the existing industrial development but whether it can fit harmoniously *with the natural environment.*

Even if – solely for the purpose of argument – fifteen wind turbines, when viewed in isolation as if they were sole development in the area, were innocuous, when added to the existing Kibby I industrial development, they become the “straw that breaks the camel’s back.” Kibby I and the natural environment are already in a tenuous balance and the incremental expansion of that development tips the scale beyond what the statute and regulations allow. Although this holistic argument is sufficient grounds, by itself, to deny the project, FBM will now proceed to demonstrate that specific aspects of the expansion will create undue adverse effects.

II. THE PROPOSED EXPANSION WILL CREATE UNDUE ADVERSE EFFECTS ON NATURAL RESOURCES SUCH AS THE CHAIN OF PONDS AND THE ARNOLD TRAIL.

The Chain of Ponds is a recognized outstanding scenic resource of statewide significance documented by the Wildlands Lakes Assessment. Because the adverse visual impact of the

proposed project is significant from the Chain of Ponds, and the public purposefully travels to the region specifically to boat on Chain of Ponds, there would be both significant undue adverse scenic impacts to those utilizing the surface waters and to all the traditional uses of the area. These impacts will be particularly acute on Long Pond and Bag Ponds, the Ponds with the most remote characteristics. The Project, as proposed, will impact 31% of the entire length of the Chain of Ponds (Post-Hearing Rebuttal Testimony of Catherine Johnson) and, as noted by Jim Palmer (LURC's consultant), will be "collectively dominant" of the scenic character from Long and Bag Ponds.

FBM respectfully suggests that an adverse impact on 31% of the length of the ponds constitutes an "undue" adverse visual impact, particularly in an environment with little other human visual impact. Given the extensive public processes for the Wildlands Lakes Assessment, which resulted in the Chain of Ponds being recognized as an outstanding scenic designation, and the Bureau of Parks and Land's Public Lands Management Planning Process, which resulted in the "Flagstaff Region Management Plan" that highlights the "highly scenic" and "wild and scenic" character of the Chain of Ponds, the conclusion is inescapable that the project presents major undue adverse scenic impacts as well as undue adverse effects on the natural resources themselves.

The Maine Historic Preservation Commission has steadfastly opposed the proposal and FBM encourages the Commission to give great weight to their objections. The Arnold Expedition Historical Society, in its Jan. 8, 2010 Letter from its President Steve Clark to LURC states, "We are particularly concerned with the visual impact of the huge proposed industrial power production facility will have on a generally pristine area, of great National Historical

significance... LURC has previously recognized the importance of this historical route as they have designated a protective zone from the end of the Chain of Ponds to the US, Canadian border in Coburn Gore. The proposed development would visually impact the entire Chain of Ponds and this protective zone, as it is approximately 3 miles or less from this area". The problems and objections raised by the Arnold Expedition Historical Society should be considered even if TransCanada has succeeded in tempering the Society itself with its promised payoff of \$100,000.

In addition to the evidence submitted by FBM, the conclusion that the project has unacceptable effects on the Chain of Ponds is supported by the pre-filed testimony and rebuttal testimony of Catherine Johnson, the review comments submitted by Alan Stearns for the Bureau of Parks and Lands, the May 6, 2010 Letter from Kirk F. Mohny, Deputy State Historic Preservation Officer of the Maine Historic Preservation Commission, and the aforementioned Letter from the Arnold Expedition Historical Society.

III. THE PROPOSED EXPANSION WILL CREATE UNDUE ADVERSE EFFECTS ON NATURAL RESOURCES SUCH AS THE SUBALPINE FOREST (FIR-HEARTLEAVED BIRCH SUBALPINE FOREST)

The adverse effects of the proposed Kibby expansion project on the 358 acres of significant rare Subalpine Forest found on Sisk Mountain, combined with the existing impacts on 614 acres of Subalpine Forest on Kibby Mountain from the original Kibby project permitted in 2008, clearly demonstrates that we have reached the tipping point in being able to fit such industrial development harmoniously into the natural environment.

In Dr. David Publicover's pre-filed and rebuttal testimonies he argues that the level of impact on a significant rare natural resource clearly rises to the level of an "undue adverse" impact. He calculates that the impact of TransCanada's proposed expansion brings the total

direct and indirect impact of the project to about 40% of the extent of the Subalpine Forest community on Sisk alone, even without further considering the existing impacts on Kibby.

In his rebuttal testimony Dr. Publicover asserts, “The occurrence of timber harvesting within this community does not justify further permanent destruction of this community type, in fact it makes it more imperative that remaining undisturbed occurrences (such as are found on Sisk) should be protected. Using past impacts in other areas to justify additional cumulative impact on this habitat would be a very slippery slope, and contrary to the intent of LURC’s third principle goal to “Maintain the natural character of certain areas within the jurisdiction having significant natural values...”

In conclusion he states, ” Finally, in regard to the current and future extent of this community and the significance of the occurrence at Sisk - because this important habitat faces risks from timber harvests and wind power development, it strengthens the reason why larger intact, undisturbed examples like Sisk should be protected as an important and well-recognized part of the state’s climate change strategy. Protecting habitats that will have an important role in allowing the region’s species to adapt to future climate change is as much needed as is wind power.

FBM concurs with this conclusion and offers this as evidence that allowing Sisk to be developed for wind power will be the straw that breaks the camel’s back in terms of the degradation of natural and cultural values resulting from cumulative impacts of incremental development.

IV. THE PROPOSED EXPANSION WILL CREATE UNDUE ADVERSE EFFECTS ON NATURAL RESOURCES SUCH AS WILDLIFE AND WILDLIFE HABITAT

Testimonies in DP 4860 suggests that the proposed expansion of the Kibby project to Sisk Mountain, combined with the impacts of the existing Kibby and Kibby Range development, will create unacceptable cumulative undue adverse impacts on wildlife and their habitats. These adverse impacts fall into three categories: industrial intrusions such as road building, turbine noise, and loss of breeding habitat. Blasting and altering the mountain ridge for wind turbines, roads and transmission lines will permanently scar the area and create an industrial cluster in the expanse of Chain of Ponds- Sisk- Kibby.

The impacts of roads on terrestrial ecosystems include direct habitat loss, facilitated invasion of weeds, pests, and pathogens, fragmentation and isolation of wildlife populations, animal behavioral modifications and a variety of edge effects. The most insidious of all effects of roads is the access they provide to humans and their tools of destruction.

With respect to roads, the original Kibby project entails 26 miles of roads, new and expanded. These are not ordinary roads but industrial-sized roads. The roads routinely measure over 100 feet from one edge of the cleared zone to the other. In places where the road crossed a major gully or climbed steeply the disturbed area upon which the ramp or road surface was built could be as much as 75 feet high and several hundred feet wide.

These are the same type of roads that can be expected on Sisk Mountain for both a new access road and the 3.6 miles ridgeline road. In Diane Boretos pre-filed testimony she indicates that the proposed project will increase adverse impacts, particularly above the 2,700 feet

elevation, to interior forest species by creating additional linear edges all along the roads, transmission line connectors, and turbine footprints. Edge effects are one of the most harmful consequences of habitat fragmentation. Roads themselves essentially preempt wildlife habitat.

As pointed out by Ms. Boretos, TransCanada has not done a comprehensive, seasonal, mammal survey in the area other than for the Canada lynx, yet readily concludes that the increase in edge, habitat loss and fragmentation will not result in adverse impacts to mammal species that potentially occur there. How can that statement be made without knowing what species are present and how they are utilizing the habitat?

The issue of noise impact on wildlife from the wind turbines in this industrial cluster is cited in Ms. Boretos' pre-filed testimony. She refers to a study published in the journal *Trends in Ecology and Evolution* (Barber, Crooks, Fristrup, 2010) that shows that human background noise, including wind turbines, can have major impacts to animals by impacting their "effective listening area." This study found that an increase as low as 10dB (decibels) in background noise could reduce the listening area for animals by 90%.

The undue adverse impact of the proposed Kibby expansion on the breeding habitat of the Bicknell's Thrush has been raised as a major concern by the Consolidated Intervenors (see Susan Gallo's pre-filed testimony). Friends of the Boundary Mountains shares that concern.

We also have grave concern about the impact of the of the proposed Kibby expansion on the breeding habitat for a large number of species, including several rare and endangered species in the Northeast, such as the Blue-Spotted Salamander, Blanding's Turtle and Eastern Ribbon Snake that breed in vernal pools. Vernal pools are small wetlands that appear only temporarily at particular times of year and according to the Recommended Periods for Vernal Pool Egg Mass Survey by Geographic Region of the Maine Department of Inland Fisheries and Wildlife surveying and mapping for locating significant vernal pools should only be done during certain precise time periods depending on geography and altitude. TransCanada did not follow these recommendations.

Please see Ms. Boretos' pre-filed testimony, FBM's Letter and Affidavit requesting a time extension for performing vernal pool mapping at the appropriate time of year, TransCanada's response, FBM filed Objection to Sixth Procedural Order In the Matter of Development Permit DP 4860, the Department of IF&W's comments and response to LURC's questions, and Ms. Boretos rebuttal testimony for a full discussion of this issue. Suffice it to say that the lack of an appropriately timed and full vernal pool survey conducted for this project jeopardizes the breeding of these species, Bob Cordes' dispensation to TransCanada notwithstanding.

The MDIFW's response only speaks to TransCanada's identified unnatural vernal pools, which cannot be determined as Significant Vernal Pools. Because there was never a vernal pool field survey done during the appropriate spring periods when wood frog and spotted salamander

egg masses (May 5 to May 20 for wood frogs, May 15th to June 5th for salamanders) are present then pools with open canopy, and shorter hydroperiods could have been missed. If the project goes forward as scheduled these possible unidentified vernal pools may be lost. Fairy shrimp and wood frogs hatch from eggs in early spring and they grow rapidly and go into their drought resistant stage by late spring or early summer, before the pools dry. It is these short - cycle vernal pools that may have been missed in the late season (July-September) vernal pool surveys that were done by the applicant.

V. TRANSCANADA HAS FAILED TO DEMONSTRATE THAT THE PROJECT WILL RESULT IN “TANGIBLE BENEFITS” BECAUSE TRANSCANADA MISUNDERSTANDS THE TANGIBLE BENEFITS TEST.

12 MRSA § 685-B (4-B)(D) requires TransCanada to demonstrate that its project, “[w]ill provide significant tangible benefits, as defined in Title 35-A, section 3451, subsection 10, within the State, as provided in Title 35-A, section 3454...” 35-A MRSA § 3451 (10) defines “tangible benefits” as:

"Tangible benefits" means environmental or economic improvements attributable to the construction, operation and maintenance of an expedited wind energy development, including but not limited to: construction-related employment; local purchase of materials; employment in operations and maintenance; reduced property taxes; reduced electrical rates; natural resource conservation; performance of construction, operations and maintenance activities by trained, qualified and licensed workers in accordance with Title 32, chapter 17 [FN2] and other applicable laws; or other comparable benefits, with particular attention to assurance of such benefits to the host community to the extent practicable and affected neighboring communities.

TransCanada’s attempts to show that its proposal will bring “tangible benefits” to the

community reveal that it does not understand the tangible benefits test.

First, TransCanada mistakenly acts as though the tangible benefits may come from it. The statute's plain language, however, requires that the tangible benefits be "attributable to the construction, operation and maintenance" of the expedited wind project. The benefits must come *from the wind project not the applicant*. The Legislature has imposed this requirement because it wants to insure that wind projects that benefit from the expedited statute actually benefit the community. To put it bluntly, the tangible benefits requirement cannot be satisfied by a rich applicant making cash payments to stakeholders in the hope of lessening opposition to the project. For example, the \$100,000 payment by TransCanada to the Arnold Expedition Historical Society on the eve of the hearings, or the purchase of solar panels for the private owners of Natanis Campgrounds so they can open a retail ice-cube business, and all such similar cash buy-offs, do not qualify as "tangible benefits" because they are not "attributable to the construction, operation and maintenance" of the wind project. Requiring the tangible benefits to result from the wind project both insures the integrity of the process so support is not "bought" by rich applicants and it helps insure that the benefits continue over the long term. In contrast, a rich applicant's incentive to make cash gifts dissipates rapidly once the permit is granted.

Second, calculating whether the project provides a net benefit requires the Commission to consider the public costs of the project as well as its benefits. TransCanada is going to receive public subsidies from taxpayers at the federal, state and, probably, the county level. If these public costs exceed the public benefits provided by the project, the public receives a net loss *not* a net benefit from the project. For a simple example, if the public gives an applicant \$100 to entice it to build something and the public eventually receives \$20 back in benefits from the

project, the public has suffered a net loss of \$80. TransCanada's approach to the tangible benefits requirement, however, is to ignore all public costs and only look at public benefits. Thus, in the above hypothetical, TransCanada would conclude that the project resulted in net tangible benefits of \$20. The Legislative goal, however, is for expedited wind projects to benefit the public. The Commission should respect this legislative intent by requiring TransCanada to submit a full accounting of all the public costs of the project, including the stimulus and tax breaks it will receive, as well as the projected benefits "attributable to the construction, operation and maintenance" of the project. Only then can the Commission determine whether the public will receive net tangible benefits if the permit is granted.

Third, TransCanada seems unwilling to discount its tangible benefits analysis by the impacts the project is going to have on Canada. In response to Commissioner Schaefer's question to Christine Cinnamon, TransCanada's Environmental Manager, at the May 12, 2010 Public Hearing on DP 4860 (Transcript, p97) as to whether there has been any discussions with Canada on issues raised by the proposed project, Ms. Cinnamon stated, "We've looked across the border of what might be present there. There is nothing that would raise any issues."

However, the informative testimony of André Blais, Canadian citizen, brings to light several significant adverse impacts on Canadian resources entailed in the proposed Kibby expansion. Mr. Blais, founder of www.sentiersfrontaliers.qc.ca (hiking club), working with The Arnold Expedition Historical Society (ME) and the Cohos Trail (NH) in creating the first International Loop Trail in North America (Arnold Trail, Sentiers frontaliers, Cohos Trail, AT, all converging to the summit of Mount Megantic renowned Astronomical Observatory) points to the impact of the turbines on the scenic landscape and panoramas of the township across the

border. This includes the Z.E.C. Louise Public Land area. Mr. Blais states, “ from mount Gosford (3936 feet) and from all the hills around Lake Megantic, from Spider Lake, Rush Lake and Lake Mégantic the WT [wind turbines] could be clearly visible within a three to fifteen mile range.” Mr. Blais cites the impact on tourism in the Lake Meganic area, expressing that “the summit drive ‘La Route des Sommets’ will eloquently show you why tourists love to come back to visit us”.

Additionally, in the Kibby Expansion Wind Project, Aesthetic Impact Assessment, James Palmer, LURC’s Scenic Quality Consultant, points out that a limitation of his assessment is that “Scenic resources in Canada are not inventoried or otherwise considered. The topographic viewshed indicates that most of Canada within 8 miles of the Kibby Expansion may have view of some turbines. While Canada may be a different country, it does not seem to be in keeping with a good neighbor policy to ignore the visual impacts of our development on their lands.” (Page 25).

It might not only be a “good neighbor policy” to inventory and consider the impacts on Canada but also a consideration of international law under the North American Agreement on Environmental Cooperation (NAAEC). NAAEC is the overarching framework for environmental cooperation between the governments of Canada, the United Mexican States, and the United States of America. Under Article 2, Section 1, Item 5 of NAAEC, it states, “Each Party shall, with respect to its territory, assess, as appropriate, environmental impacts.” TransCanada can cite nothing in the statute or regulations that allows it to ignore the impact on adjacent Canadian land, impacts that may considerably diminish the tangible benefits from this project when properly considered.

Fourth, the problems raised by Boralex, the operators of the biomass energy plant in

Stratton-Eustis, need to be taken seriously when calculating whether this project will provide real tangible benefits to the community (see May 24, 2010 Letter from Boralex). Boralex's concern is that the expanded Kibby project will create congestion on the transmission lines it shares with Kibby. This concern is especially significant as it was originally raised in the Kibby proceedings (see October 15, 2007 Letter from Boralex) and the Commission granted the development permit for Kibby with the assurance that the congestion issue would be resolved. Obviously, the "creative solutions" to the problem of renewable congestion supposedly being worked on between TransCanada and Boralex that are referenced in Boralex's Oct. 2007 letter have not materialized and the problem will only be made more untenable by any expansion of Kibby.

Boralex concludes that if DP 4860 is approved, there will be a 20% reduction in the ability of the biomass plant to generate electricity necessitating the plant to close down. This would create a net reduction in renewable energy for Maine and a significant job loss for the region. Concerns about the impacts that localized transmission congestion would have on the existing local renewable generating plant in Stratton are not trivial, but lead to the conclusion that the Kibby expansion will not satisfy, but will interfere with, the demonstrated need for transmission capacity for a renewable power generating facility already existing in the area. As Boralex stated in its October 2007 letter: "If two or more renewable projects are competing for space on a capacity-limited line, then any hour when there is congestion will result in renewable energy not being generated."

Fifth, the adverse impacts on those living in closest proximity to the site of the proposed wind power installation, the residents of Chain of Ponds, must be considered when calculating whether this project will provide a net value of real tangible benefits. As testimony presented by

Dr. William Baker, a 30 year seasonal resident of CoP, so poignantly illustrates, the draw of unspoiled Chain of Ponds for seasonal residents and tourist alike will be lost if the Kibby expansion is allowed. As Dr. Baker states: “Once the Boundary Mountains are invaded by wind farms, no matter how well intentioned, they will be changed, gone forever. In the Northeast, we are running out of places like the Boundary Mountains. The roads, turbines and transmission lines that will come with the wind farms will destroy the essence of this place—the rare peace and tranquility that local residents, camp owners like myself, and visitors treasure.”

In testimony before the Commission on May 12, Wendy Glenn, seasonal resident in Chain of Ponds Township, correctly asserts that Chain of Ponds Township would be the host community of the proposed Kibby expansion and questions the *lack of tangible benefits* for the host community attributable to the construction, operation and maintenance of the proposed development. As a long-time real estate agent in the area, Ms. Glenn observes that windmills will decrease the value of property, hardly a tangible benefit for the Chain of Ponds community. Karen Pease, of Lexington Township and owner of Narrow Gauge Realty in Kingfield, testified on May 11 before the Commission and pointed to the very early results of a survey of the impressions of real estate buyers she is coordinating that indicated buyers are leery of buying property in areas where industrial wind is being considered for the mountaintops. Ms. Pease states: “I have had potential buyers tell me, without prompting, that they have passed on making offers on certain parcels of property specifically because they learned that an industrial wind development was slated for the neighborhood. Add those words to my experience—a real estate broker with 22 years in the business—and I can assure you that property values are going to decrease in areas like Sisk where there is little development and where such encroachments into

the wild mountaintops will be visible, audible and influential on the quality of place which these mountains symbolize.”

Indeed, studies and data concerning the impact of wind energy projects on real estate values that were submitted into the record of DP 4860 by FBM support the contentions of our local real estate professionals. These include the AGO-Wind-Turbine-Impact-Study by Appraisal Group One, 9/9/2009; Impact of Wind Turbines on Market Value of Texas Rural Land by Gardner Appraisal Group Inc., 2/2009; and Living with the impact of Windmills by Chris Luxemburger, Sutton Group – Professional Realty Inc.

The burden is on TransCanada to convince the Commission that its proposal will result in tangible benefits to the community. Since TransCanada: 1) mistakenly considers cash payments it makes that are not attributable to the construction, operation and maintenance of the project as tangible benefits; 2) fails to include in its calculations any accounting for the public costs of the project; 3) ignores its Canadian neighbors; 4) does not consider the economic impact its project will have on the Boralex biomass energy plant; and 5) does not consider the aesthetic, quality of life, and economic impacts on the host community, TransCanada has failed to present this Commission with the information necessary to determine if the project really will create net tangible benefits for the community. Since the information submitted by TransCanada is inadequate, it is impossible for the Commission to conclude that TransCanada has met its burden of showing that the project will create tangible benefits to the community. Therefore, the Commission has no choice but to deny the application.

VI. THE PROJECT WILL HAVE AN UNDUE ADVERSE IMPACT ON THE STREAMS IN THE AREA.

Kibby Stream is a class A stream as a result of its undeveloped character and scenic value. The combined development of the Kibby A and B series plus the proposed expansion all sit above and will directly impact the headwater region of Kibby Stream, resulting in undue adverse impact to this watershed and the organisms that live and thrive here today. Gold Brook supports wild Brook trout and provides temperature refuge for landlocked salmon. The Roaring Brook Mayfly and the Spring Salamander both are known to occur in its watershed. All species will be significantly impacted by TransCanada's expansion proposal. Pre- and Post construction monitoring only provides the results of impact. They do nothing to protect the numerous species of concern. Denial of this permit is the only insurance of no undue adverse impact. The Management Guidelines for Land Use In or Adjacent to Spring Salamander and Roaring Brook Mayfly Habitat submitted by the Maine Department of Inland Fisheries and Wildlife, dated March 4, 2010, states, "*Stream Crossings should be avoided. If crossings are unavoidable, they should be minimized to a narrow trail with canopy cover maintained to the greatest extent possible.*" (emphasis added)

TransCanada's estimate of hydrological impacts resulting from the proposed project understates the initial, secondary and collective impacts from this expansion. Impacts from culvert placement, bridge crossings, ditch turnouts, plunge pools and miles of swales to divert, channel or disperse run-off from seeps, springs and rainfall are significant and will alter the hydrology and change the natural flow of water in the area.

In TransCanada's revised drawings, C-20, 54 culverts, from 18 to 36 inches in diameter and up to 120 feet in length, will be installed. The proposed change in the width of culverts, designed to assure passage of fish and other aquatic life may not prevent the blockage of

culverts. Bigger is not necessarily better. Larger diameter culverts result in shallower water, given a specific gallon per minute flow. Smaller debris can now lodge at the entrance, blocking passage of migrating fish. During times of lower water depth, larger culverts result in shallower water, and thus higher water temperature. This elevation of temperature will stress Brook Trout, Atlantic Salmon and other species of concern in the proposed waterways. Regardless of culvert size, maintenance is the only sure way of preventing blockage and prevention of fish migration. There has been no related maintenance schedule submitted by TransCanada.

There will be thirty-nine poles placed within the 100-foot buffer zone of the watercourses, a direct impact to the streams themselves. The lower turbines and associated roads and buried cables will be above the headwaters of Clearwater Brook, a steep tributary of Long Pond and the Chain of Ponds. The upper footprint's precipitation flows north into our neighbor, Quebec. The access road and its 34 kV collector line runs into and along the upper reaches of the Kibby Stream Valley.

Friends of the Boundary Mountains believes the impacts of over 100 stream crossings, bridges, pole placement to stream buffers and endless secondary impacts to fish and aquatic life far exceeds "Undue Adverse Impact." The basis in record for the above analysis is the testimony of Bertrand Lambert and Nancy O'Toole.

VII. THE PROJECT'S ROADS WILL HAVE AN UNDUE ADVERSE IMPACT ON NATURAL RESOURCES.

The 2010 CLUP, in its "Mountain and Soil Resources", confirms that one of the greatest threats to the fragile environment above 2700 feet is the impact of erosion from road construction. See also 1997 CLUP Chapter 3, especially page 56. This is also one of FBM's

greatest concerns. From initial clearing and grubbing through blasting, excavation, the placement of road and pad material and even the construction of engineering erosion controls yield, produces more soil particles. The precipitation runoff patterns in this place of high rainfall are changed, resulting in the alteration of localized hydrology, which leads to secondary impacts to the wetlands, streams and vernal pools that house the many species of concern in the proposed footprint.

Estimates for the cut and fills for road construction and pad placement indicate that 93,000 cubic yards per turbine, or 1.4 million cubic yards of material will be moved from its location of origin to its final resting place. The most obvious and radical changes and development will be above 2700 feet. The new construction drawings show cuts or fills up to 45 feet deep. Engineering controls will include a staggering 43 plunge pools, 24 ditch turnouts and 12 rock sandwiches to reconnect wetlands and hydrology where they will be effective.

TransCanada's new plans also show the design upgrade for the Wahl road to the substation. Fills of ten feet or more will impact the hydrology and the quality of drainage into Kibby stream, parallel to Wahl road.

From Tower 14 to Tower 15 there will be an average of 30 feet deep cut or fill. There will also be 100 feet of crushed rock feathered down the side slopes. Before, beyond and around Tower 11 cuts of up to 50 deep feet are necessary to maintain grade. Side slopes measuring 120 feet will be buried under more crushed rock. At Tower 6 road fill ranges from 20 to 50 feet. From Tower 2 to Tower 3 fills are estimated at 40 feet. Tower 1's approach calls for a short distance of 14% grade, which exceeds recommendations by Department of Environmental Protection standards of Best Management Practices for road construction. Tower 1 has up to 50

feet of fill and the first 300 feet of road will see as much as 360 feet down slope burial. The rest of the tower placement follows this pattern of cut or fill with significant side slope burial covering large areas and have a huge impact.

TransCanada's upgrades to the Mile 5 road, where numerous wetlands need to be reconnected after widening and ditching the road will result in serious impacts. This part of the road is down slope of everything altered above and significant engineering controls are proposed along this route. The new design for rock sandwich placement to reconnect hydrology is new technology and has only been used at higher elevation at the Kibby project. The new design describes the upslope side of the rock sandwich geotextile fabric as being folded to prevent silt and fines from flowing through the sandwich and eventually plugging it, preventing water flow. Once the folded edge is filled with silt and the adjacent ditch no longer functions as designed, water will not get through the rock sandwich. It is doubtful the rock sandwiches will meet the demands of the 100-ton carrying capacity. Will this design protect the integrity of the sandwich when its placement is below 50 feet of fill, or a mere few feet below the surface? As described in the construction drawing details, C-16, 16 inches of aggregate base course gravel above the rock and fabric must be compacted to 95% of maximum density. Will this be enough to hold up the weight and not squash out or crush the actual rock sandwich? The rock sandwich design will require constant maintenance to function. The design is still new and untested for long use and function.

The comments by David Rocque in regard to Acid Rock testing and Mitigation plan, dated April 16, 2010, raises concerns over inadequate tools to deal with the subject if an occurrence of acid rock is encountered. TransCanada's answer was to implement the same plan

used at the Kibby project. It says that permanent mitigation measures will be decided on a case-by-case basis, after consultation process with state agencies. Isolation method to protect groundwater and adjacent areas seemed to be the best temporary method discussed by Dave Rocque. As for permanent measures, Rocque questioned all three options. They can only be performed if the ground water is 10 feet above the groundwater table. At the proposed site, groundwater table is generally near the surface. Clay cover is extremely challenging to stabilize. Shotcrete was determined to be the best option. The mitigation revised Plan dated May 10, 2010 by TransCanada goes into great detail of the geological evaluation, water testing, boring and post construction observations and compliance monitoring. The acid mitigation measures are the same description given in the original document, but with a little more detail. The proposal is to utilize the turbine and road fill areas below 2,700 and at least 10 feet above the water table for burial and or encapsulation of any potential acid rock drainage producing bedrock, which is in direct opposition to Dave Rocque's concerns or suggestions. The use of crushed limestone to neutralize potential acid rock drainage is a temporary mitigation method that should be used as little as possible. As for using shotcrete in high mountain, sub-alpine areas, it will fracture and break apart from the extreme temperatures and rainfall.

There is no clear plan for mitigation of acid seepage if such an area is breached. There is no tested solution and no absolute information that serious acid rock will not be encountered. This leaves us the unpleasant expectation that when acidic rock is encountered the mountain side will bear the consequences while TransCanada and its contractors pass the responsibility on to other parties until the problem is ignored and eventually forgotten.

This proposed expansion is not consistent with the Commission's new adopted CLUP,

with required regulations and statues. The cumulative impacts, from the road construction, pad placement and electrical corridor, will cause undue adverse impact to the project footprint area and beyond. The above analysis is found in the record in the testimony of Bertrand Lambert and Nancy O'Toole.

Conclusion

For all the above reasons, the Commission should **DENY** TransCanada's application (DP 4860) to expand the Kibby Wind Power Project.

June 6, 2010

Signed:

Bob Weingarten, FBM Spokesperson
29 Davis Road
Vienna, ME 04360