

Verrill Dana_{LLP}

Attorneys at Law

JULIET T. BROWNE
jbrowne@verrilldana.com
Direct: 207-253-4608

ONE PORTLAND SQUARE
PORTLAND, MAINE 04112-0586
207-774-4000 • FAX 207-774-7499
www.verrilldana.com

August 16, 2010

Via E-mail and Overnight Mail

Marcia Spencer Famous
Maine Land Use Regulation Commission
22 State House Station
Augusta, ME 04333

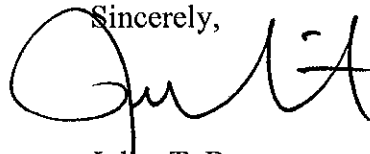
Re: TransCanada Maine Wind Development, Inc.
Kibby Expansion Project - DP 4860

Dear Marcia:

Enclosed please find an original and two paper copies as well as 12 CDs, of TransCanada's amendment to DP 4860 to reflect a reduced 11-turbine 33 MW project.

Thank you for consideration of this material, and if you have any questions, please do not hesitate to contact me.

Sincerely,



Juliet T. Browne

JTB/prf
Enclosure

cc: Samantha Horn-Olsen (By e-mail)
Catherine M. Carroll (By e-mail)
Amy Mills (By e-mail)
Bob Weingarten (By e-mail)
Nancy O'Toole (By e-mail)
Jenn Burns Gray (By e-mail)
Nick Di domenico (By e-mail)
Christine Cinnamon (By e-mail)
Dana Valteau (By e-mail)

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STATE OF MAINE
LAND USE REGULATION COMMISSION

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| IN THE MATTER OF DEVELOPMENT |) | AMENDMENT TO REDUCE PROJECT |
| APPLICATION DP 4860 |) | SIZE FROM 45 MW TO 33 MW BY |
| TRANSCANADA MAINE WIND |) | ELIMINATION OF SOUTHERN FOUR |
| DEVELOPMENT, INC. |) | TURBINES AND ASSOCIATED PROJECT |
| |) | ELEMENTS |

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**STATE OF MAINE
LAND USE REGULATION COMMISSION**

**IN THE MATTER OF DEVELOPMENT APPLICATION DP 4860
TRANSCANADA MAINE WIND DEVELOPMENT, INC.**

**AMENDMENT TO REDUCE PROJECT SIZE FROM 45 MW TO 33 MW
BY ELIMINATION OF SOUTHERN FOUR TURBINES AND ASSOCIATED
PROJECT ELEMENTS**

1.0 Introduction

TransCanada Maine Wind Development, Inc. (“TransCanada”) hereby amends its DP 4860 Development Application by reducing the Project from a 15-turbine 45 MW layout to an 11-turbine 33 MW project (hereinafter referred to as the “Project” or “11-turbine Project”). This amendment is in response to the issues raised during the Commission’s deliberations on the 15-turbine layout and specifically addresses impacts to natural and scenic resources.

The reduced project layout eliminates the most southerly four turbines presented in the original development application. The removal of these turbines results in the elimination of 1.5 miles of associated ridge road (also referred to as “crane road”), 1.4 miles of collector line, work areas associated with the four turbines and a 0.6 mile secondary access trail. There are no changes to the locations of the remaining 11 turbines, ridge roads, access road to the ridge, collector system, or improvements to Mile 5 road. The revised Project layout is depicted on the attached Exhibit 1.

Elimination of the southern four turbines reduces the visual impacts on Chain of Ponds, significantly reduces the fragmentation of, and reduces direct and indirect impacts to, the Fir-Heart-leaved Birch Subalpine Forest, leaving intact over 87% of the mapped community. It also removes several project elements that were in or adjacent to Bicknell’s thrush habitat. These changes address many of the concerns expressed by the Commissioners, while preserving the economics necessary to make the Project viable.

The need to reduce the Project size will delay permitting and therefore construction will not commence in 2010. As a result, the in-service date is pushed forward from December 2011 to late summer of 2012, with an anticipated construction start date in 2011. Attached as Exhibit 2 is a revised construction schedule.

2.0 Tangible Benefits

The 11-turbine Project is expected to produce 92,000-MWh per year of emission-free renewable energy. This is equivalent to the annual electrical usage of 13,000 Maine households. This is based on an anticipated average annual net capacity factor of 31.8% (92,000 MWhs divided by (33 MW x 8,760 hours per year)).

The high value wind resource at this site enables a high energy capture per turbine of 8,400-MWh/turbine as compared to more typical wind sites in Maine such as the Stetson project, which is significantly less at 4,400-MWh/turbine. This results in a much tighter and more efficient project from a land use perspective.

The capital cost of the 11-turbine Project is approximately \$92 million, which represents a significant investment in the property tax base and local economy of Franklin County. One additional field operations employee will be added to the operations team. Based on the experience at the original Kibby project, several hundred construction jobs are expected for the Project (during Kibby's peak construction in the summer of 2009, 315 construction workers were employed). Importantly, it is conservatively estimated that 80% of those workers are from Maine. Property taxes payable in the UT are estimated at \$400,000 per year or approximately \$10 million over 25 years. In addition, the Project is estimated to generate revenues to the State through the payment of State income taxes of approximately \$13 million over a 25-year period.

Consistent with the requirements of P.L. 2009, ch. 642, TransCanada will provide a community benefits package equivalent to \$4,000 per turbine per year over a twenty-year period, for a cumulative package of \$880,000.

This community benefits package will consist of the following:

- i) \$33,000 per year payable to the town of Stratton (\$660,000 over twenty years);
- ii) \$110,000 lump sum payment to the Maine Department of Labor to support green job education and training in Franklin County; and,
- iii) \$110,000 lump sum payment to the High Peaks Alliance to support land conservation and trail corridor acquisition in Franklin County.

The community benefits package is in addition to the tax benefits and direct and indirect economic benefits associated with construction and operation of the Project, and which are discussed in the initial application and supporting materials.

Finally, although not counted toward the tangible benefits package, TransCanada will contribute \$75,000 to a fund to be jointly administered by the Arnold Expedition Historical Society and the Maine Historic Preservation Commission to further the preservation and continued public use and awareness of the Arnold Trail.

The originally proposed \$100,000 donation to preserve Bicknell's thrush overwintering habitat in the Caribbean has been eliminated due to the reduced project economics, coupled with the reduced resource impacts and lack of nexus between Caribbean habitat preservation and impacts in Maine.

3.0 Economics of a Further Reduced Project

The eight-turbine project that is supported by the Consolidated Parties is not economic for TransCanada due to the high fixed costs associated with elements of the Project such as the substation, collector line, improvements to Mile 5 road and the access road to the ridge, as well construction management and project development costs. TransCanada's economic analysis indicates that the 11-turbine Project proposed in the amended application is the absolute minimum number of turbines and total projected output necessary to make the project viable. While viable, even an 11-turbine Project falls below TransCanada's normal investment parameters. However, in light of the commitments and substantial economic investment made to date, TransCanada has made a decision to pursue the 11-turbine Project.

4.0 Reduction to Impacts on Subalpine Forest

During its deliberations the Commission expressed concern about impacts to the Fir-Heart-leaved Birch Subalpine Forest (the "subalpine forest"). The 11-turbine layout reduces impacts by almost half and will result in a total direct impact of approximately 20 acres and indirect impacts of 35 acres.

The original 15-turbine layout avoided and minimized impacts to this community to the maximum extent practicable. For example, road alignments were shifted away from the highest wind resource areas to minimize fragmentation and moved toward the edges of the community in an effort to maintain the largest contiguous blocks of the forest community practicable. Additionally, in response to review comments by the Maine Natural Areas Program (MNAP), TransCanada moved the location of Turbine 11 and its associated road to further minimize fragmentation and impacts to the subalpine forest. As a result, the 15-turbine layout had direct impacts of only 39 acres and indirect impacts of 63 acres (total of direct and indirect impacts: 102 acres), and left intact two large blocks of 183 contiguous acres and 73 contiguous acres.

The Consolidated Parties argued that the fragmentation resulting from the southern four turbines and associated ridge road were similar to the fragmentation resulting from Turbine 11 in its original location, and therefore the impacts associated with those turbines and ridge road were unacceptable.¹ This concern was also reflected in the draft denial document.² The 11-turbine Project eliminates the southern four turbines and associated ridge road. This change eliminates 19 acres of direct impact and 28 acres of indirect impact and, importantly, eliminates fragmentation and leaves intact 313 contiguous acres – or 87.5% – of the 358-acre mapped community. A map showing the 11-turbine Project and the mapped subalpine forest is attached as Exhibit 3. Two maps comparing the impacts of the 15-turbine and 11-turbine layouts to the subalpine forest are attached as Exhibit 4.

¹ Post Hearing Brief Submitted by the Consolidated Parties at 10.

² DP 4860 Draft Denial at Finding of Fact #27.A(1)(g) at pp. 27-28.

5.0 Reduction to Impacts on Bicknell's Thrush Habitat

During its deliberations, the Commission also expressed concerns with impacts to Bicknell's thrush habitat. Because Bicknell's thrush are often found in subalpine forests, the reduction in impacts to the subalpine forest described above will also reduce impacts to potential Bicknell's thrush habitat. Additionally, and as set forth in its initial application, TransCanada took a number of steps to identify existing Bicknell's thrush habitat, and to minimize impacts to that habitat. For example, survey protocols were approved in advance by Maine IF&W (and are consistent with the protocols used and approved in the Kibby Project). These surveys indicated there are approximately 88 acres of existing Bicknell's thrush habitat in the immediate vicinity of the Sisk ridgeline where the Project will be located. This area includes two separate distinct areas where high use by the birds was observed and documented during intensive spot-mapping field surveys. Through discussions with IF&W, these two areas were mapped as "core" Bicknell's thrush habitat. Elimination of the southern four turbines eliminates the potential for impact to the larger of the two core areas as well as areas of potential habitat. The total clearing impacts to identified Bicknell's thrush habitat are also reduced from 8 to 5 acres. Two maps depicting impacts of the 15-turbine and 11-turbine layouts to identified Bicknell's Thrush habitat are attached as Exhibit 5.

Finally, the Consolidated Parties identified risks of bird collision for turbines located near these core areas. The draft denial document also identifies increased risks of collision associated with the southern four turbines. DP 4860 Draft Denial Conclusion 4.C. at pp. 32-33. This amended layout eliminates the risks of collision from the southern four turbines.

6.0 Reduced Visual Impacts on Resources of State or National Significance

During the Commission deliberations there was a concern expressed about the number of scenic resources of state or national significance within the viewshed of the Project, as well as confusion about application of the visual impact standard to those scenic resources. The Wind Energy Act does not establish a presumption that identified resources of state or national significance be protected or that visual impacts on such resources are inappropriate. Rather, the Wind Energy Act *limits the scope of review* to identified resources of state or national significance, and sets forth specific factors for the Commission to consider in determining whether a project significantly compromises views from the resource "such that the development has an unreasonable adverse effect on scenic character or existing uses related to scenic character."³ The Wind Energy Act also provides that visibility is not by itself a basis for concluding the views are unacceptable, and that views of facilities located at a distance of more than 8 miles shall be considered insignificant.⁴

Elimination of the southern four turbines and associated ridge road and collector line will reduce the visual impacts of the Project on Chain of Ponds and other scenic resources of

³ 35-A M.R.S.A. § 3452(1).

⁴ *Id.* at § 3452(3).

state or national significance. These four turbines were most proximate to these resources, and as such, their elimination reduces the visual impact of the Project. Attached as Exhibit 6 is a map depicting the Kibby Project turbines (both the A and B series) and the 15-turbine and 11-turbine layout of the Kibby Expansion Project. The views of the 11-turbine Project from the resources of state or national significance are summarized below.

Arnold Trail

It should be noted that the Arnold Trail is not separate and distinct from Chain of Ponds and Arnold Pond - they share the same geography in this area of Maine. Additionally, the Kibby Project turbines are already visible from this resource; hence the nature of the visual impact is not a fundamental change to the character of the resource but rather an incremental impact from the additional turbines on the same area of Chain of Ponds. Finally, although it was suggested that the Maine Historic Preservation Commission (MHPC) had concluded that the Kibby Expansion project did not meet the Commission's visual impact standard, that is not the case. MHPC's comments on the project were provided as part of the first step in the federal Section 106 consultation process that occurs in connection with the Army Corps of Engineers wetland permitting. The fund to further the preservation and continued use the Arnold Trail, and discussed above, is being developed and implemented as part of that federal review process. MHPC has not provided any comment on the project's compliance with LURC's review criteria.

Crosby & Arnold Ponds

Views of the 11-turbine project from Crosby and Arnold Ponds are distant, ranging from 6.5 to 7.5 miles, and therefore are not expected to adversely impact users of those resources. Moreover, where there is visibility from Arnold and Crosby Pond, the prominent landform of Mount Pisgah dominates the views, thereby further diminishing the appearance of the turbines. Finally, the views from Crosby and Arnold Ponds are mostly of Turbines 1-8, to which the Consolidated Parties do not object and for which support was expressed at the deliberative session.

Kibby Stream

Within the relevant 8 mile distance from the project site, Kibby Stream is located on private land owned by Plum Creek and can only be accessed from the private lands of Plum Creek or Kennebec West Forest Company - both of which are land hosts for the Project.

As acknowledged by the Commission's visual expert, the vegetation along much of Kibby Stream blocks potential Project views. One of the few areas from which the turbines are visible from Kibby Stream is an existing equipment staging area that is heavily used for parking and storage of harvesting machinery, log sorting, and other industrial forest activities, and, as such, there is not an expectation of high scenic quality.

The other potential view from Kibby Stream is nearly 8 miles from the Project, which is the limit of visual significance.

Chain of Ponds

Chain of Ponds is a single water body comprised of five connected smaller ponds; Round, Natanis, Long, Bag and Lower ponds. The 11-turbine Project will not be visible from Round or Lower ponds and only the tips of the blades from one or two turbines will be visible from Natanis Pond.⁵ Visibility will be limited to a portion of Long Pond and a back bay of Bag Pond. From both these areas it should be noted that Kibby Project turbines are visible, so again, the issue is the incremental visual impact of turbines in a landscape that already hosts existing turbines. Attached as Exhibit 7 is the viewshed map that shows the portions of Chain of Ponds where turbines from the 11-turbine Project (including in some instances only the tips of blades) are potentially visible. For comparison, attached as Exhibit 8 is the viewshed map that shows the portions of Chain of Ponds where turbines from the northern eight turbines (again, including in some instances just the tips of blades) are potentially visible. As apparent from these two view shed maps, there is no significant difference in views of the northern eight turbines and the proposed 11-turbine Project.

The 11-turbine Project also eliminates the access road associated with the southern four turbines, which the Consolidated Parties claimed would scar the steep slope and be fully and permanently visible from multiple locations along Chain of Ponds, thereby contributing to the adverse and unacceptable visual impact on that resource.⁶

Attached as Exhibits 9 and 10 are visual simulations of the 11-turbine Project and the 15-turbine Project from Viewpoint 5, which represents the location of maximum Project visibility. Comparison of these simulations shows the reduction in visual impacts resulting from elimination of the southern four turbines. Finally, it should be noted, that the visual simulations attached as Exhibits 9 and 10 depict Turbine 11 in its modified location, as requested by MNAP and MDIFW (located down slope and further to the west of its originally proposed locations). The shift in location of Turbine 11 results in Turbines 8-11 being viewed through a more narrow arc from Chain of Ponds. The visual simulations included in the original application material and included with the pre-filed testimony depicted Turbine 11 in its original position. As a result, from Chain of Ponds, Turbines 8-11 appeared to extend further down the ridgeline, as opposed to the more narrow view of Turbines 8-11 that results from Turbine 11 in its modified location.

7.0 Vernal Pools

Wetland delineation, including survey for vernal pools, was conducted from July to October of 2009. It was evident in both the public hearing and the deliberations that

⁵ The simulation from Viewpoint 1 on Natanis Pond, which was included with TransCanada's pre-filed testimony, showed visibility of four turbines. There will be no visibility of the 11-turbine project from Viewpoint 1.

⁶ See Post Hearing Brief of Consolidated Parties at 23.

there was some confusion on when the surveys were conducted and a mistaken assumption that they were conducted only in October and in conditions when it would not be possible to identify the presence of the vernal pool. In fact, vernal pools can readily be identified during almost any time of the year by visual cues such as a topographical depression which has compacted leaf litter, water staining, or a film of silt on leaf litter, trees, woody debris, rocks, or other plants. Leaf litter in a dry active vernal pool may also have fingernail clams and the shells or casts of aquatic insects. Additional evidence that is used to identify the presence of vernal pools includes the presence of wetland plants such as sphagnum moss and certain fern, grass, sedge, or shrub species (Calhoun and deMaynadier 2004). All of these physical signs are evidence of sufficient seasonal flooding for a vernal pool to exist at any given location even if the pool is dry at the time of observation.

Moreover, during the 2009 survey season, including during all months when surveys were undertaken, there was higher than normal precipitation and therefore pools did not dewater as they might have done in drier conditions. The presence of water certainly provides one but not the only indicator of a vernal pool, and the scientists who surveyed for vernal pools are well-trained to identify all indicators of vernal pools.

The only biological significance of the surveys being undertaken outside of the breeding season is that TransCanada could not determine whether the vernal pools were significant, because significance is based on the number and type of species present during the short breeding window. As discussed during the public hearings, however, all potential vernal pools were treated as state jurisdictional significant vernal pools assuming use by substantial numbers of vernal pool species. Such treatment affords them protection greater than required by LURC and the State. Even so, the Project layout and design avoids direct impacts to potential vernal pools. All potential vernal pools that exist in the Project area were man-made and would not be regulated by the State. Notwithstanding, TransCanada has committed to protecting these man-made features as though they were natural vernal pools (jurisdictional).

8.0 Areas to be Disturbed by Construction of the Project

The 11-turbine Project will result in reductions of 1.5 miles of ridge road, 1.4 miles of collector line and elimination of 0.6 miles of a secondary access trail. This results in a reduction of 36.3 acres of clearing impacts. A revised Table B.13-3 showing a detailed breakdown of land area in acres for the revised project is attached as Exhibit 11.⁷

The 11-turbine Project has a minimal reduction in impacts to wetlands, i.e., 309 sq ft or 0.007 acres from the 15-turbine Project. Total wetland impacts are 4.34 acres. A Revision to Tables B.15-1 and B.15-2 is attached as Exhibit 12.⁸ A revised Figure B.15-5, showing wetlands and streams, is attached as Exhibit 13. The changes to cut and fill estimates and a revised Table B.13-5 is attached as Exhibit 14.⁹ Additionally, a revised

⁷ Exhibit 11 includes both a redlined and clean version of Table B.13-3.

⁸ Exhibit 12 includes both redlined and clean versions of Tables B.15-1 and B.15-2.

⁹ Exhibit 14 includes both a redlined and clean version of Table B.13-5.

Plan and Profile Drawing and Project Overall Location Map and Drawing are attached as Exhibits 15 and 16.