

## Supplemental Testimony before the Maine Department of Environmental Protection

## By Rob Wood, Energy Policy and Projects Advisor, The Nature Conservancy in Maine

May 1, 2019

Re: Central Maine Power's New England Clean Energy Connect transmission proposal File Number: NAE-2017-01342

Thank you for the opportunity to provide supplemental testimony in the proceeding on the proposed Central Maine Power (CMP or "the applicant") New England Clean Energy Connect (NECEC) transmission corridor. This testimony addresses alternatives and mitigation, including specific questions posed in the Department's Tenth Procedural Order.

## Mitigation priorities

Based on the evidence presented in the hearing to date, The Nature Conservancy (TNC) has developed a general priority order for alternatives and mitigation that reflects the likelihood of avoiding and minimizing habitat fragmentation. Starting with the most effective fragmentation mitigation measures and moving toward less effective, this list is as follows:

- 1) Co-location with Rte. 201, including undergrounding. This would avoid all new habitat fragmentation impacts.
- 2) Co-location with the Spencer Road, including undergrounding. This would minimize new habitat fragmentation impacts.
- 3) Using taller pole structures in the existing right-of-way to allow mature forest (trees at least 30-feet high) to grow under the wires. This could avoid most new impacts by minimizing forest clearing, although the location and size of pole-access roads is an important variable. Any residual impacts could be compensated for with additional land conservation in the affected region. As noted below, in areas of scenic concern, the use of taller pole structures would need to be evaluated against visual impacts.
- 4) Tapering vegetation and creating wildlife travel corridors in the right-of-way, combined with new land conservation in the affected region. This approach would minimize fragmentation impacts for certain species, but it would still result in significant fragmentation for pine marten, a key umbrella species in this region, and other species that require mature forest. As

such, we would recommend compensation in the form of land conservation to offset any residual fragmentation and protect marten habitat in the region.

We consider all of Segment 1 to be a resource of particular concern and significance. Therefore, we strongly support mitigation measures for *all of Segment 1*. As noted in our pre-filed direct testimony, western Maine as whole—including all of Segment 1—is a resource of regional and global significance.

If it is determined infeasible to address all of Segment 1, the areas identified in TNC Supplemental Exhibit 1 are our top priorities for mitigation. This exhibit includes the nine priority areas identified in our pre-filed direct testimony, as well as additional areas identified by Group 4 during the public hearing on April 4, 2019. For the nine areas identified in our pre-filed direct testimony, Universal Transverse Mercator (UTM) coordinates are listed in TNC Supplemental Exhibit 2. The variables used to determine these nine areas include:

- hydrology (rivers and streams);
- wetlands from the National Wetlands Inventory;
- land cover (2018 NAIP imagery);
- Inland waterfowl and wading bird habitats;
- conserved lands; and
- TNC's 'Resilient and Connected' lands coverage.

It is important to note that these nine areas were identified by TNC staff in consultation with other scientists from other conservation organizations. It would be useful to have additional review and input from knowledgeable staff within the Maine Department of Inland Fisheries and Wildlife.

15. In TNC's nine areas of concern, whether tapering would adequately reduce the forest fragmentation of any clearing.

Tapering, combined with wildlife travel corridors, would be preferable to a 150' cleared right-of-way and could benefit certain species. However, as noted by Dr. Simons-Legaard, tapering and wildlife travel corridors—as described in the revised compensation plan—would not meet the habitat needs of the pine marten. Using taller pole structures to allow for mature forest canopy across the right-of-way, or co-locating the line with existing roads (and potentially undergrounding), would better meet marten habitat needs and the needs of interior forest species more generally. If tapering were applied throughout all of Segment 1, we would still recommend significant additional compensation in the form of land conservation in the region to offset residual habitat fragmentation impacts.

16. Locations where tapering vs. taller overhead poles would be preferred.

To avoid and minimize habitat fragmentation, taller overhead poles would always be preferred to tapering. The best method for avoiding and minimizing habitat fragmentation is to allow for mature forest canopy in the right-of-way. Taller overhead poles throughout Segment 1, as described by the applicant for the Mountain Brook and Gold Brook crossings, would largely accomplish this objective.

There are two caveats. First, the location of the roads used to access the poles is an important variable. Even with taller poles in place, if there is a 10-foot wide road running down the length of the corridor, this road would still be a fragmenting feature (especially for marten), albeit a minor one. To the extent that taller poles can be combined with modifications to the access roads, such that more poles are accessed from an angle perpendicular to the ROW (rather than establishing a continuous road within the ROW), this could result in significant stretches where mature forest canopy is fully retained in the ROW. A good example of this preferable outcome is illustrated in Exhibit CMP-3-F of the applicant's pre-filed direct testimony, which shows two short access roads coming off Spencer Road to access poles 3006-732 and 3006-731, allowing for mature forest canopy to be retained across the full right-of-way near these poles. (Note that the same exhibit also demonstrates the residual linear fragmentation caused by the access road that connects poles 3006-735, 3006-734 and 3006-733).

Second, TNC acknowledges and is sensitive to the fact using taller structures could alter the visual impacts of the proposed project. Although we are focused on wildlife and habitat impacts in this permitting process, we understand that scenic impacts are a core concern of other parties, and therefore we encourage the Department to consider additional visual impact analysis incorporating taller pole structures, if necessary. Tapering may be preferred where taller poles would be especially visible, particularly if the corridor would also be crossing early successional forest or wetlands (i.e., not mature forest) in that stretch of corridor.

Relatedly, it is important to understand in more detail how raising pole heights would work in practice. For example, is there a standard pole height, or are poles custom-built for the needed height such that they are no taller than necessary?

We also believe that if a variety of mitigation measures are under consideration, it may be beneficial to conduct additional detailed evaluation of the proposed corridor, in consultation with MDIFW and other parties, that considers variables such as existing forest cover, topography and scenic concerns.

26. Whether an underground route co-located with Route 201 would be technically feasible, economically viable, and/or a satisfactory option to mitigate concerns raised during the hearing.

Yes, an underground route co-located with Route 201 would be a preferable option to mitigate habitat fragmentation concerns raised during the hearing. Regarding whether it is technically feasible and economically viable, TNC does not have the expertise to answer these questions. These are precisely the types of questions that should be answered in a full alternatives analysis.

## Additional considerations

Based on the information provided in the applicant's pre-filed rebuttal testimony by Mr. Bardwell and in Group 3's pre-filed sur-rebuttal testimony by Mr. Paquette, we believe that trenching within the existing Segment 1 right-of-way would not be environmentally preferable, as it would result in significant disturbance during line construction and significant permanent

clearing in the ROW. However, if it is found feasible to use horizontal directional drilling over significant distances in the existing Segment 1 right-of-way (without termination stations every several thousand feet), we would still encourage further consideration of this technique.

Finally, we note that mitigation measures designed to maintain mature forest canopy in the right-of-way would likely minimize the need for pesticide use. This could be an important co-benefit of these measures.

Thank you again for the opportunity to provide supplemental testimony.

By: Data Wand

Date: 5/1/19

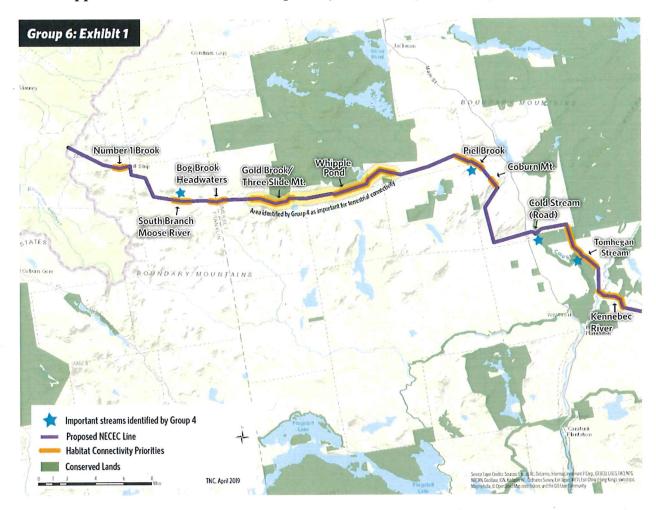
The above-named Rob Wood did personally appear before me and made oath as to the truth of the foregoing pre-filed testimony.

Notary Public/Attorney at Law

Date: 1 MAY 2019

My Commission Expires: \_\_\_\_\_\_

TNC Supplemental Exhibit 1: Revised priority connectivity areas map



TNC Supplemental Exhibit 2: UTM coordinates for TNC-identified connectivity areas

Area	POINT_X	POINT_Y
Bog Brook Headwaters - western point	381705.0002	5035531.798
Bog Brook Headwaters - eastern point	383393.5418	5035673.454
Whipple Pond - western point	395911.4481	5036268.186
Whipple Pond - eastern point	402555.1709	5038644.645
Piel Brook - western point	409762.2505	5040509.549
Piel Brook - eastern point	412572.5583	5039175.624
Coburn Mtn western point	413628.0425	5037880.552
Coburn Mtn eastern point	414152.547	5037226.54
Tomhegan Stream - western point	422282.8985	5032355.803
Tomhegan Stream - eastern point	425510.8216	5027984.878
Number 1 Brook - western point	370814.0355	5039410.288
Number 1 Brook - eastern point	372085.4133	5039441.914
Gold Brook/ Three Slide Mtn eastern point	391066.7409	5035834.8
Gold Brook/ Three Slide Mtn western point	386475.5749	5035772.419
South Branch Moose River - western point	377527.0164	5035690.695
South Branch Moose River - eastern point	379352.8315	5035529.837
Kennebec River - western point	425839.5454	5025091.18
Kennebec River - eastern point	428548.5968	5023299.963