



October 31, 2018

From:
Rod Nadeau, Ph.D.
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To:
Maine Land Use Planning Commission
22 State House Station
Augusta, Maine 04333-0022

Re: New England clean energy connect project case# 2017-00232

I am writing this letter to express my concern and opposition to the new AVANGRID (CMP) 145 mile transmission line corridor that is proposed to be built over the Western Mountains region and across the Kennebec River in the West Forks area in Somerset County.

Commented [HS1]: Please email it directly to DEP.LUPC.PUC. MASS DPU and SCC

Professionally, I've been a registered Maine Guide since 1987 and I hold designations in Whitewater, Recreation, Sea Kayaking, and Commercial Boat Operation. I'm now in my 20th year working full time as an Adventure-Based Counselor having led countless wilderness adventures over the years. Personally, being born and raised in Maine, I've been enjoying our wilderness since the 1960's when I lived in Farmington. As a Maine Guide and a resident of Maine, I have a thorough understanding and appreciation for the Maine wilderness. I therefore have serious concerns over the pending risks and perils that may destroy the wilderness if this 145-mile transmission line is allowed to be built.

I echo the concerns numerous folks have already testified their deep concern over the negative impact the transmission line would have on both the environment and Maine's economy. However, for sake of brevity, I will testify solely on my primary concern: ***the devastating negative impact the transmission line would have on the therapeutic value of the Maine wilderness.***

As an Adventure-Based Counselor, I purposefully take my clients into the Maine wilderness to expose them to the therapeutic nature of wilderness settings. Human contact with nature offers a range of health benefits. So, if you scar the Maine wilderness with this 145-mile-long powerline, you will diminish our opportunities to reap the health benefits of a vast region of wildness. We, therefore, need to save our Maine wilderness to preserve its therapeutic value.

The health benefits via contact with nature:

A recent comprehensive review of the literature by Frumkin, et al. (2017) provides an excellent evidenced-based summary of the health benefits of human contact with nature. This study not only outlines the health benefits of exposure to nature, it also provides supporting research for each health claim:

1. Reduced stress
2. Better sleep

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3. Improved mental health
 - a. Reduced depression
 - b. Reduced anxiety
4. Greater happiness, well-being, & life satisfaction
5. Reduced aggression
6. Reduced ADHD symptoms
7. Increased prosocial behavior & social connectedness
8. Lower blood pressure
9. Improved post-operative recovery
10. Improved birth outcomes
11. Improved recovery from congestive heart failure
12. Improved child development (cognitive & motor)
13. Improved pain control
14. Reduced obesity
15. Reduced diabetes
16. Better eyesight
17. Improved immune function
18. Improved general health in adults, children, & cancer survivors
19. Reduced mortality
20. Improved asthma & allergies

Furthermore:

- Folks who walk/run in natural settings report less anger & sadness directly after activity in comparison to those who walk/run in built environments (Bowler, 2010)
- Participants in a study reported that being in nature made them feel more alive – beyond the effects of activity & social interaction (Ryan et al., 2010)
- The New York State Department of Environmental Conservation website lists eight similar health benefits from exposure to forests (<https://www.dec.ny.gov/lands/90720.html>)

Nature Deficit Disorder:

- Louv (2005) suggests there's an increasing number of youth suffering from *nature deficit disorder* – the notion that spending less time outdoors contributes to a wide array of behavioral problems.
- Other research has found that children who report more time outdoors are more physically active and less sedentary, and show enhanced psychosocial health in comparison to kids who spend less time outdoors (Larouche et al., 2017)

The implication here – we need to preserve our aesthetically beautiful Maine wilderness in hopes that we can lure kids into the wild for sake of their physical and mental health. If we scar the wilderness with a transmission line it will be less appealing for kids (and adults) to venture into wild places and it will diminish the therapeutic value of the region. While participants are in a wilderness setting the therapeutic benefits are tangible as they are away from technology and you can see the positive changes in vivo. However, on numerous occasions, I have witnessed a diminished therapeutic experience during wilderness excursions when we encountered a built structure such as a powerline, logging road, or building. Unfortunately, during a therapeutic wilderness

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adventure, as soon as participants interface with the built environment, you can see them transported instantly back into their dysfunctional way of life back home with involvement with social media, substance use, criminal activity, etc. In essence, the pro-social therapeutic change process comes to a screeching halt while participants relapse into the older dysfunctional patterns that were problematic and the impetus for them to escape into the wild in the first place. Hence, if you allow this 145-mile transmission line to be built, you will be ruining the therapeutic potential for the Western Mountains region of Maine.

Green Space:

- There is increasing evidence demonstrating many benefits of exposing children to nature including reduced stress, greater physical health, more creativity, and better concentration in the classroom (Novotney, 2008).
- A national study found that “green” outdoor activities reduced attention-deficit hyperactivity disorder symptoms significantly more than activities in built outdoor and indoor settings (Kuo & Taylor, 2004).

Conclusion:

If you scar the Maine wilderness with a 145-mile transmission line corridor, the Western Mountains region will lose its therapeutic value. Please don't be short sighted and sell our wilderness for a short-term gain only for a long term devastating loss. Once you carve up the wilderness, it's lost for generations, if not forever. My sincerest hope is that you keep Maine wild, scenic, and therapeutic for generations to enjoy by NOT scaring our wilderness with a 145 mile transmission line corridor. Please oppose the New England clean energy connect project case# 2017-00232

Respectfully,

Rod Nadeau, Ph.D.



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