



Mr. Martin Honigberg, Chairman
New Hampshire Site Evaluation Committee
29 Hazen Drive
Concord, NH 03301

Re: Northern Pass Project

Dear Mr. Honigberg:

It is necessary to clarify Chapter 4. Environmental Impacts (page 4-41) in the "Draft Northern Pass... Volume 1: Impact Analyses... July 2015" The Northern Pass transmission towers as well as the existing AC line which will be placed on new metal towers will cross the Upper Ammonoosuc River in Stark, NH. This is a section of river which receives various types of water recreation and 4-41 does not delve into the possible negative physical effects on paddlers beneath these towers.

Let me quote from 4-41: "...the recognized hazards of power line fields arise from indirect effects, in particular from contact currents that enter the body of a grounded person who touches a large conductive object that is located in the field (microshock). A typical scenario is when a grounded worker touches a truck or other large vehicle that is insulated from ground, which in effect acts as a large antenna that picks up current from the line." Could this relate to watercraft (canoe, paddle boards, tubing, aluminum canoe or boat)? Would this relate to someone stepping from a canoe onto land beneath a Northern Pass tower?

The next paragraph states: "These hazards are controlled by safe work practices..." Well, what about canoes or other water-based traffic? The paragraph continues to mention that the limits (safe work practices and National Electrical Safety Code) "would not exclude perceptible microshock to an individual who touches a car or truck that is parked beneath a HVAC line". There is the mention of "microshock may occur to an individual who touches a parked vehicle beneath the line; such effects would be annoying but not hazardous." What about the canoe traffic or canoe group which chooses to land and picnic beneath the AC and DC towers?

The paragraph which begins with "HVDC lines do not create indirect effects from contact currents..." notes that HVDC lines produce air ions due to corona that flow to ground, creating small DC currents ... These currents will induce electrostatic charges on ungrounded objects in their path, which can result in transient shocks if they are discharged through a person who touches them."

In closing, I feel it is necessary to study the possible negative physical effects of the Northern Pass towers on water recreation beneath them.

Thank you.

Bill Schomburg