October 11, 2012

Commission to Study the Feasibility of Establishing Energy Infrastructure Corridors Within the Existing Transportation Rights of Way

(SB 361, Chapter 220, Laws of 2012, RSA 362-G)

Final Questions and Comments

In addition to the questions in the Commissioner’s letter that DAS would like answered, DAS has the following comments.

Yes, it is feasible to use state ROWs for energy infrastructure.

Which corridors are the most appropriate? For ease of install (in terms of legal process and ownership rights), using the interstates and highways identified by DOT would be the best option. However, we should continue to explore the use of rail, specifically abandoned rail beds, as the disruption to current use of these ROWs is null. Also, it is likely that more remote areas would be able to be accessed by using rail. These areas may be the ones in most need of this infrastructure. We realize the question of ownership of the railways and permission to use the land for purposes other than transportation are issues. These should be addressed before any plans are made to use these ROWs.

Will using ROWs materially enhance the delivery of energy to NH? Will reliability and security be increased? Possibly. Underground lines are less likely to be disturbed by tree/limb blow downs during storms. They are a less visible target for terrorism. However, underground lines could be damaged by storm erosion or by accidental digging in areas by uninformed or negligent parties. Will this lead to increased costs to consumers?

What are the available technologies? There are plenty of available technologies to make considering underground infrastructure a worthy effort. Both material technologies as well as methods for installation have advanced significantly in the recent past.

What are the long term economic benefits? Burying infrastructure would provide some short term job opportunities for construction. Long term job opportunities are questionable. If money is paid to the state for use of the ROWs, where would it go? Underground infrastructure and providing infrastructure to more areas of NH could help stimulate business development by bringing natural gas to more areas of the state. Natural gas is a desirable fuel because it is clean and inexpensive. Fiber, telecom, and broadband are also desirable and not currently accessible in all parts of the state.
What will the infrastructure do to retail prices of energy in NH? The costs to build the infrastructure would need to be recouped which could drive up prices, but the increased supply of energy could potentially drive down prices. This is still an unknown. Have we determined the upfront costs and maintenance costs of each option and which is financially better in the long run?

The state is advised to come up with a plan of how the infrastructure would be laid out below the ground. As much pre-planning that can be done as possible will help limit the disruptions to the state ROWs. Also, the state would want to hear from various markets and technologies (both current and potential future) so that space can be assigned for each.

Does DOT need to do any further research on whether this conflicts with the current public purposes of the ROWs?

Should eminent domain be used to retain property to construct this infrastructure? Eminent domain is not a good idea for widespread property acquisition or change-of-use. It could be exercised in extreme circumstances when all other options have been exhausted.

Have we considered the health impacts of burying lines versus overhead lines? What are the effects of EMF on humans? What are the effects on wildlife if they are aboveground, buried, or under water? Should we consider hearing from an expert in public health on this issue?

The environmental impacts of using state ROWs seem to be less than aboveground applications. The land has already been disturbed and cleared. Minimal additional clearing would need to be done compared with installing new towers and lines.

There is no question that underground lines are expensive. DAS believes it should be an option but not mandated. Companies should evaluate on a project by project basis to consider monetary costs as well social, environmental, and health related costs.

How many electric lines, pipelines, conduits could fit within a corridor? What are the spacing requirements? What is the most efficient orientation of the infrastructure?

Questions/comments regarding the NE Energy Link packet dated October 2012. Page 2-8 and 2-9 have diagrams of construction. What do 50’ construction area and 30’ occupancy agreement mean?

Page 8-8 has a summary of (Maine’s?) requirements. DAS thinks this is a good model and New Hampshire should consider similar requirements for underground infrastructure.

Thank you for the opportunity to share our comments.

Sincerely,

Karen L. Rantamaki, P.E.
State Energy Manager