# Electric Transmission Line Routing Along Existing Transmission Line Routes and Highway Rights-of-way

Report to the Legislature

January 14, 2011

As required by Laws 2010, Ch. 288, Sec. 4

# ESTIMATED COSTS OF PREPARING THIS REPORT

The cost information reported below is the estimated cost of preparing this report document. Special funding was not appropriated for the costs of preparing this report.

In accordance with Minn. Stat. §3.197, the estimated cost incurred by Minnesota Public Utilities Commission in preparing this report is less than \$1,000.

### **BACKGROUND**

Before an electric utility can construct a high voltage transmission line in Minnesota, it must, with some exceptions, obtain two major approvals from the Minnesota Public Utilities Commission (Commission)<sup>1</sup>. First, it must request and obtain a Certificate of Need. In this proceeding, the Commission examines whether the proposed transmission line is a prudent solution to projected electricity needs, and if so, the appropriate size, configuration and timing of the project. Then, in a separate proceeding, an Applicant must propose at least two possible routes for the transmission line and, after a public review process which may consider additional route alternatives, obtain a route permit from the Commission. In the route permit, the Commission designates a final route and specific design of the high voltage transmission line.

Electric transmission lines that are subject to the Commission's routing jurisdiction range in capacity from 115,000 volts up to 500,000 volts (currently the largest built in Minnesota). Smaller sized lines are not state regulated, but may require local government permitting. The range of right-of-way width required for electrical code clearances for new, independent lines is generally 100 feet up to 200 feet. The lines are constructed and owned by electric utilities and have a service life of 40+ years, often more. Right-of-way easements are typically in perpetuity.

When making its determination of the final route for a transmission line, the Commission is guided by the criteria specified by the Legislature in Minn. Stat. §216E.03, subdivision 7. Subpart (b) of this statute identifies twelve specific considerations that the Commission should evaluate when selecting the route for a high voltage transmission line. Among these considerations is subpart (b)(8), which directs "evaluation of potential routes that would use or parallel existing railroad and highway rights-of-way."

In 2010, the Legislature added a new subpart to Minn. Stat. §216E.03, subdivision 7. This new subpart provides as follows:

(e) The commission must make specific findings that it has considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and the use of parallel existing highway right-of-way and, to the extent those are not used for the route, the commission must state the reasons.

The new subpart identifies a new consideration for the Commission to evaluate (use of existing high voltage transmission routes). In addition, it directs the Commission to explain its underlying rationale when the route selected does not run parallel to an existing high voltage transmission line route or highway right-of-way.

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<sup>&</sup>lt;sup>1</sup> The jurisdiction for the siting of large energy infrastructure was transferred from the Minnesota Environmental Quality Board to the Commission in 2005.

### THE LEGISLATIVE MANDATE

Laws of Minnesota 2010, Chapter 288, Section 4 provides as follows:

- (a) The Public Utilities Commission and the commissioner of transportation must cooperate to implement the policy in Minnesota Statutes, section 216E.03, subdivision 7, Paragraph (e).
- (b) The commission must report any statutory amendments required for the implementation of Minnesota Statutes, section 216E.03, subdivision 7, paragraph (e) to the chairs and ranking minority members of the energy and transportation policy committees of the legislature by January 15, 2011.

## **METHODOLOGY**

The co-location of electric transmission lines with other linear infrastructure has been a consideration, and a practice, in Minnesota for many years. A recognizable example is the alignment of the Twin Cities 345kV 'loop' along a large portion of the I-94 Interstate system encircling the metro area. Both smaller lines that are permitted by local governments and the large lines under the Commission's jurisdiction have been permitted and constructed adjacent to pre-existing electric lines, pipelines, highways and railroads throughout the state. There are many factors that determine the feasibility and prudency of co-locating linear infrastructure, and there is ample experience, and case law, that recognize a preference for limiting, when reasonable, the development of large, new rights-of-way. The Commission, and the Minnesota Environmental Quality Board prior to July 2005, approved numerous transmission line projects that utilized, to varying degrees, pre-existing rights-of-way, and issued findings supporting conclusions that such use was superior to other alternative routes, complying with the mandate in Minn. Stat. 216E.02 to "locate large electric facilities in an orderly manner compatible with environmental preservation and the efficient use of resources".

The Legislature has now directed the Commission to make specific findings when routes are approved that evidence consideration of locating a route for a high-voltage transmission line on an existing high-voltage transmission route and the use of parallel existing highway right-of-way. More importantly, relative to a new dimension of Commission review, is a requirement that, to the extent those are not used for the route, the Commission must state the reasons for the decisions. The application of this directive will require some adjustment in the review process, and some experience working with both Applicants and the DOT, to assure compliance. The Commission will generally approach this mandate understanding that the policy is that feasible and prudent alternative routes that utilize existing linear infrastructure are to be given thorough and balanced consideration.

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The Commission welcomes the emphasis on cooperation with the DOT, and initiated a series of work sessions of senior staff in both agencies in July 2010. These work sessions provided a significantly expanded understanding of the roles and mission of the agencies relating to the accommodation of utilities on highways in Minnesota. The discussions focused on:

- Establishing a generic 'platform' of DOT policies, regulations and practices relevant to utility accommodation that would inform the Commission's consideration across multiple transmission project dockets, with the intent to build a reference case and avoid overly redundant development of background in individual project dockets.
- Identification of optimum opportunities in the Commission's review process for the DOT to participate and represent its interests, analysis and recommendations.
- Appropriate timing and detail of transmission project design and locational characteristics that would support the ability of DOT to participate effectively within the Commission's prescribed process timelines.
- Understanding the complex array of DOT programs, funding, operations and relationships with local governments and numerous non-government organizations.
- Reviewing technical and functional considerations associated with utility accommodation in, and parallel to highway rights-of-way, and DOT procedures in reviewing utility applications to the DOT for accommodation after the Commission has approved a highway-use route.
- Reasonableness of DOT cost, and source of funding, to participate in Commission proceedings involving possible highway accommodations.
- Mechanisms to better integrate utility-driven electric transmission planning with state transportation planning.

Senior utility transmission planners attended a work session specifically to review the long-range planning opportunities to coordinate project development. The Commission observes that these opportunities appear very productive and commits to facilitating continued planning coordination between the state's electric transmission utilities and DOT, including the various other governmental interests associated with DOT programs.

The Commission further observes that the DOT has significantly increased both its staff capacity and participation in Commission transmission project dockets. Of particular note, the lead role and direct participation of David Seykora, DOT Office of Chief Counsel, has been very effective in assisting the Commission in its understanding of DOT interests and in development of the Commission's records of decision.

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#### **CONCLUSIONS**

The Commission anticipates the continued cooperation of DOT in further review and application of the above-listed elements of utility accommodation in highway infrastructure. We have not identified any further legislative changes needed at this time. If appropriate, we will consider changes in administrative rules guiding the route selection process to clarify and expand the roles and information needed to ensure compliance with our new mandate.

We are not recommending any further legislative changes at this time.

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