

Transmission line routing criteria

We understand that the process of determining the route for new electric transmission lines can be a sensitive one and we work hard to balance the many factors that must be considered. Great River Energy follows a thorough process and uses the same set of criteria used by the state of Minnesota for considering routing options. Through input we receive from landowners, the public, state and federal agencies and communities, we consider options that are appropriate for the location and issues associated with a particular project.

Balancing routing criteria

Many factors must be balanced in developing routes that are appropriate for transmission lines. Transmission line routing may involve trade-offs between a particular set of advantages and disadvantages. Landowner and community input is always taken into consideration and the impacts of alternatives are carefully considered. The goal of this thorough process is to propose a route that meets the needs of the electric system and reduces local impacts as much as possible.

During the process of developing a transmission line route, new information may require adding new route segments to our project map or reconsidering route



As much as possible, we follow existing corridors, such as along highways, railroads, pipelines or existing power lines.

segments that had been eliminated earlier. For this reason, we encourage all landowners to follow developments *throughout the process*.

Routing criteria

Great River Energy uses the following routing criteria as a guide for identifying routing options. These are the same factors used by the state of Minnesota¹.

- Human settlement
 - Displacement
 - Noise
 - Aesthetics
 - Cultural values
 - Recreation
 - Public services
- Public health and safety

- Land-based economies
 - Agriculture
 - Forestry
 - Tourism
 - Mining
- Archaeological and historic resources
- Natural environment
 - Air
 - Water quality
 - Flora (vegetation, trees)
 - Fauna (wildlife)
- Rare and unique natural resources
- Design options that:
 - Maximize energy efficiency
 - Mitigate adverse environmental effects
 - Accommodate future expansion of transmission or generating capacity
- Use of or paralleling of:
 - Existing rights of way
 - Survey or property lines
 - Natural division lines
 - Agricultural field boundaries
- Use of existing transportation, pipeline, and electrical transmission systems or rights of way
- Electric system reliability

- Cost of constructing, operating, and maintaining the facility, which are dependent on design and route
- Irreversible and irretrievable commitments of resources

The state of Minnesota prohibits the construction of transmission lines through two distinct areas²:

Wilderness areas. No high voltage transmission line may be routed through state or national wilderness areas.

Parks and natural areas. No high voltage transmission line may be routed through state or national parks or state scientific and natural areas unless the transmission line would not materially damage or impair the purpose for which the area was designated and no feasible and prudent alternative exists. Economic considerations alone do not justify use of these areas for a high voltage transmission line.

To view the entire chapter relating to electric infrastructure, visit revisor.mn.gov/index.php. Then choose “Rules” from the drop-down menu and enter “7850” in the search bar.

1. Adapted from Minnesota Rules 7850.4100 – Factors Considered
2. Minnesota Rules: 7850.4300 – Prohibited Routes

