



Factors Considered in the Public Utilities Commission Transmission Line Route Permitting Decision

In determining whether to issue a permit for a high voltage transmission line, the Commission considers the following (Minnesota Rule 7850.4100):

- Effects on human settlement, including, but not limited to displacement, noise, aesthetics, cultural values, recreation and public services;
- Effects on public health and safety;
- Effects on land-based economics, including, but not limited to, agriculture, forestry, tourism, and mining;
- Effects on archaeological and historic resources;
- Effects on the natural environment, including effect on air and water quality resources and flora and fauna;
- Effects on rare and unique natural resources;
- Application of design options that maximize energy efficiencies, mitigate adverse environmental effects, and could accommodate expansion of transmission or generating capacity;
- Use or paralleling of existing right-of-way, survey lines, natural division lines, and agricultural field boundaries;
- Use of existing large electric power generating plant sites;
- Use of existing transportation, pipeline, and electrical transmission systems or rights-of-way;
- Electrical systems reliability;
- Costs of constructing, operating, and maintaining the facility which are dependent on design and route;
- Adverse human and natural environmental effects which cannot be avoided; and
- Irreversible and irretrievable commitments of resources.



Issues Typically Covered in an Environmental Assessment

An environmental assessment (EA) provides information on the existing environment, potential impacts from the project, and potential mitigation for these impacts. Issues and topics evaluated typically include, but are not limited to:

Human Settlements

- Aesthetics – *visual impact from project, tree clearing*
- Noise – *noise during construction and operation*
- Property Values
- Cultural Resources – *archaeological and historic resources*
- Land Use – *existing land use and zoning, future plans*
- Interference – *radio, TV, GPS, cellular phones*
- Recreation – *parks, trails*
- Community Services – *fire, police, EMT*
- Utility Systems – *electric, gas, water, telephone infrastructure*
- Traffic and Transportation – *existing and planned roads, airports, railroads*
- Health and Safety – *safety and health during construction and operation, electric and magnetic fields (EMF), implantable medical devices*

Natural Environment

- Air Quality
- Geology and Soils – *geology, topography, erosion*
- Water Resources – *water quality, lakes, rivers, groundwater, floodplains*
- Wetlands – *type, size, function*
- Flor and Fauna – *vegetation, fish and wildlife, threatened and endangered species, special natural communities, noxious weeds*

Economic and Land Use Resources

- Tourism – *resorts, parks, hunting, fishing, trails*
- Agriculture – *prime farmland, crops, livestock, orchards*
- Forestry
- Commercial
- Mining – *gravel, sand, quarries*