

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Public Service Commission
Energy Conversion Facility Siting Criteria
Rulemaking

PU-19-290

CHAPTER 69-06-08
CRITERIA

Section	
69-6-8-1	Energy Conversion Facility Siting Criteria
69-6-8-2	Transmission Facility Corridor and Route Criteria

69-06-08-01. Energy conversion facility siting criteria.

The following criteria must guide and govern the preparation of the inventory of exclusion and avoidance areas, and the site suitability evaluation process.

1. **Exclusion areas.** The following geographical areas must be excluded in the consideration of a site for an energy conversion facility.
 - a. Designated or registered national: parks; memorial parks; historic sites and landmarks; natural landmarks; historic districts; monuments; wilderness areas; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.
 - b. Designated or registered state: parks; forests; forest management lands; historic sites; monuments; historical markers; archaeological sites; grasslands; wild, scenic, or recreational rivers; game refuges; game management areas; management areas; and nature preserves.
 - c. County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions; hardwood draws; and enrolled woodlands.
 - d. Areas critical to the life stages of threatened or endangered animal or plant species.
 - e. Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged.
 - f. Areas within one thousand two hundred feet of the geographic center of an intercontinental ballistic missile (ICBM) launch or launch

control facility.

- g. Areas within thirty feet on either side of a direct line between intercontinental ballistic missile (ICBM) launch or launch control facilities to avoid microwave interference.

2. **Additional exclusion areas for wind energy conversion facilities.** The following geographical areas must be excluded in the consideration of a site for a wind energy conversion facility:

a. Areas within:

- (1) One and one-tenth times the height of the turbine from the nearest edge of an interstate or state roadway right of way;
- (2) One and one-tenth times the height of the turbine plus seventy-five feet from the centerline of any county or maintained township roadway;
- (3) One and one-tenth times the height of the turbine from the nearest edge of any a railroad right of way;
- (4) One and one-tenth times the height of the turbine from a the nearest edge of a one hundred fifteen kilovolt or higher transmission line right of way; and
- (5) One and one-tenth times the height of the turbine from the property line of a nonparticipating landowner and three times the height of the turbine from an inhabited rural residence of a nonparticipating landowner, unless a variance is granted. A variance may be granted if an authorized representative or agent of the permittee, the nonparticipating landowner, and affected parties with associated wind rights file a written agreement expressing all parties' support for a variance to reduce the setback requirement in this subsection. A nonparticipating landowner is a landowner that has not signed a wind option or an easement agreement with the permittee of the wind energy conversion facility as defined in North Dakota Century Code chapter 17-04.

3. **Avoidance areas.** The following geographical areas may not be approved as a site for an energy conversion facility unless the applicant shows that under the circumstances there is no reasonable alternative. In determining whether an avoidance area should be designated for a facility the

commission may consider, among other things, the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative sites. Economic considerations alone will not justify approval of these areas. A buffer zone of a reasonable width to protect the integrity of the area must be included. Natural screening may be considered in determining the width of the buffer zone.

- a. Historical resources which are not designated as exclusion areas.
 - b. Areas within the city limits of a city or the boundaries of a military installation.
 - c. Areas within known floodplains as defined by the geographical boundaries of the hundred-year flood.
 - d. Areas that are geologically unstable.
 - e. Woodlands and wetlands.
 - f. Areas of recreational significance which are not designated as exclusion areas.
4. **Additional avoidance areas for wind energy conversion facilities.** A wind energy conversion facility site must not include a geographic area where, due to operation of the facility, the sound levels within one hundred feet of an inhabited residence or a community building will exceed fifty forty-five dBA. The sound level avoidance area criteria may be waived in writing by the owner of the occupied residence or the community building.
5. **Selection criteria.** A site may be approved in an area only when it is demonstrated to the commission by the applicant that any significant adverse effects resulting from the location, construction, and operation of the facility in that area as they relate to the following, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum. The effects to be considered include:
- a. The impact upon agriculture:
 - (1) Agricultural production.
 - (2) Family farms and ranches.
 - (3) Land which the owner demonstrates has soil, topography, drainage, and an available water supply that cause the land

to be economically suitable for irrigation.

- (4) Surface drainage patterns and ground water flow patterns.
- (5) The agricultural quality of the cropland.

b. The impact upon the availability and adequacy of:

- (1) Law enforcement.
- (2) School systems and education programs.
- (3) Governmental services and facilities.
- (4) General and mental health care facilities.
- (5) Recreational programs and facilities.
- (6) Transportation facilities and networks.
- (7) Retail service facilities.
- (8) Utility services.

c. The impact upon:

- (1) Local institutions.
- (2) Noise-sensitive land uses.
- (3) Light-sensitive land uses.
- (4) Rural residences and businesses.
- (5) Aquifers.
- (6) Human health and safety.
- (7) Animal health and safety.
- (8) Plant life.
- (9) Temporary and permanent housing.
- (10) Temporary and permanent skilled and unskilled labor.

- d. The cumulative effects of the location of the facility in relation to existing and planned facilities and other industrial development.
6. **Policy criteria.** The commission may give preference to an applicant that will maximize benefits that result from the adoption of the following policies and practices, and in a proper case may require the adoption of such policies and practices. The commission may also give preference to an applicant that will maximize interstate benefits. The benefits to be considered include:
- a. Recycling of the conversion byproducts and effluents.
 - b. Energy conservation through location, process, and design.
 - c. Training and utilization of available labor in this state for the general and specialized skills required.
 - d. Use of a primary energy source or raw material located within the state.
 - e. Not relocating residents.
 - f. The dedication of an area adjacent to the facility to land uses such as recreation, agriculture, or wildlife management.
 - g. Economies of construction and operation.
 - h. Secondary uses of appropriate associated facilities for recreation and the enhancement of wildlife.
 - i. Use of citizen coordinating committees.
 - j. A commitment of a portion of the energy produced for use in this state.
 - k. Labor relations.
 - l. The coordination of facilities.
 - m. Monitoring of impacts.
 - n. A commitment to install lighting mitigation technology for wind energy conversion facilities subject to commercial availability and federal aviation administration approval.

History: Amended effective August 1, 1979; July 1, 2006; April 1, 2013; July 1, 2017; July

1, 2018; amended effective _____, 2019.

General Authority: NDCC 28-32-02, 49-22-18

Law Implemented: NDCC 49-22-05.1, 49-22.1-03

69-06-08-02. Transmission facility corridor and route criteria.

The following criteria must guide and govern the preparation of the inventory of exclusion and avoidance areas, and the corridor and route suitability evaluation process. Exclusion and avoidance areas may be located within a corridor, but at no given point may such an area or areas encompass more than fifty percent of the corridor width unless there is no reasonable alternative.

1. **Exclusion areas.** The following geographical areas must be excluded in the consideration of a route for a transmission facility. A buffer zone of a reasonable width to protect the integrity of the area must be included. Natural screening may be considered in determining the width of the buffer zone.
 - a. Designated or registered national: parks; memorial parks; historic sites and landmarks; natural landmarks; monuments; and wilderness areas.
 - b. Designated or registered state: parks; historic sites; monuments; historical markers; archaeological sites; and nature preserves.
 - c. County parks and recreational areas; municipal parks; and parks owned or administered by other governmental subdivisions.
 - d. Areas critical to the life stages of threatened or endangered animal or plant species.
 - e. Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged.
 - f. Areas within one thousand two hundred feet of the geographic center of an intercontinental ballistic missile (ICBM) launch or launch control facility.
 - g. Areas within thirty feet on either side of a direct line between intercontinental ballistic missile (ICBM) launch or launch control facilities to avoid microwave interference.
2. **Avoidance areas.** The following geographical areas may not be considered in the routing of a transmission facility unless the applicant shows that under the circumstances there is no reasonable alternative. In determining whether an avoidance area should be designated for a facility,

the commission may consider, among other things, the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative routes. Economic considerations alone will not justify approval of these areas. A buffer zone of a reasonable width to protect the integrity of the area will be included unless a distance is specified in the criteria. Natural screening may be considered in determining the width of the buffer zone.

- a. Designated or registered national: historic districts; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.
 - b. Designated or registered state: wild, scenic, or recreational rivers; game refuges; game management areas; management areas; forests; forest management lands; and grasslands.
 - c. Historical resources which are not specifically designated as exclusion or avoidance areas.
 - d. Areas which are geologically unstable.
 - e. Within five hundred feet [152.4 meters] of a residence, school, or place of business. This criterion shall not apply to a water pipeline transmission facility.
 - f. Reservoirs and municipal water supplies.
 - g. Water sources for organized rural water districts.
 - h. Irrigated land. This criterion shall not apply to an underground transmission facility.
 - i. Areas of recreational significance which are not designated as exclusion areas.
3. **Selection criteria.** A corridor or route shall be designated only when it is demonstrated to the commission by the applicant that any significant adverse effects which will result from the location, construction, and maintenance of the facility as they relate to the following, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum. The effects to be considered include:
- a. The impact upon agriculture:
 - (1) Agricultural production.
 - (2) Family farms and ranches.

(3) Land which the owner can demonstrate has soil, topography, drainage, and an available water supply that cause the land to be economically suitable for irrigation.

(4) Surface drainage patterns and ground water flow patterns.

b. The impact upon:

(1) Sound-sensitive land uses.

(2) The visual effect on the adjacent area.

(3) Extractive and storage resources.

(4) Wetlands, woodlands, and wooded areas.

(5) Radio and television reception, and other communication or electronic control facilities.

(6) Human health and safety.

(7) Animal health and safety.

(8) Plant life.

4. **Policy criteria.** The commission may give preference to an applicant that will maximize benefits that result from the adoption of the following policies and practices, and in a proper case may require the adoption of such policies and practices. The commission may also give preference to an applicant that will maximize interstate benefits. The benefits to be considered include:

a. Location and design.

b. Training and utilization of available labor in this state for the general and specialized skills required.

c. Economies of construction and operation.

d. Use of citizen coordinating committees.

e. A commitment of a portion of the transmitted product for use in this state.

f. Labor relations.

- g. The coordination of facilities.
- h. Monitoring of impacts.
- i. Utilization of existing and proposed rights of way and corridors.
- j. Other existing or proposed transmission facilities.

History: Amended effective August 1, 1979; January 1, 1982; February 1, 1995; July 1, 2006; April 1, 2013.

General Authority: NDCC 49-22-18

Law Implemented: NDCC 49-22-05.1