CHAPTER 69-06-08

CRITERIA

Section

- 69-06-08-01 Energy Conversion Facility Siting Criteria
- 69-06-08-02 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.

- Exclusion areas. The following geographical areas must be excluded in the consideration of a site for an energy conversion facility.
 - 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.
 - 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.
 - County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions; hardwood draws; and enrolled woodlands.
 - d. Prime farmland and unique farmland, as defined by the land

inventory and monitoring division of the soil conservation service, United States department of agriculture, in 7 C.F.R. part 657; provided, however, that if the commission finds that the prime farmland and unique farmland that will be removed from use for the life of the facility is of such small acreage as to be of negligible impact on agricultural productions, this exclusion does not apply.

- e. Irrigated land.
- f. Areas critical to the life stages of threatened or endangered animal or plant species.
- g. Areas where animal or plant species that are unique or rare to this state would be irreversibly damaged.
- Areas within one thousand two hundred feet of the geographic center of an intercontinental ballistic missile (ICBM) launch or launch control facility.
- 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 less than:
 - One and one-tenth times the height of the turbine from 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;

- One and one-tenth times the height of the turbine from any railroad right of way;
- (4) One and one-tenth times the height of the turbine from a one hundred fifteen kilovolt or higher transmission line; and
- (5) One and one-tenth times the height of the turbine from the property line of a nonparticipating landowner, unless a variance is granted. A variance may be granted if an authorized representative or agent of the permittee 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

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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 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.
 - 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 <u>or light</u>—sensitive land uses.

- (3) Rural residences and businesses.
- (4) Aquifers.
- (5) Human health and safety.
- (6) Animal health and safety.
- (7) Plant life.
- (8) Temporary and permanent housing.
- (9) 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.
 - 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.
- 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.
- I. The coordination of facilities.
- m. Monitoring of impacts.
- n. A commitment to install aircraft detection and lighting systems for

wind energy conversion facilities subject to Federal Aviation

Administration approval.

History: Amended effective August 1, 1979; July 1, 2006; April 1, 2013; ______. General Authority: NDCC 49-22-18 Law Implemented: NDCC 49-22-05.1

69-09-02-35. Installation and maintenance - Conformance to National Electrical Safety Code.

The installation and maintenance of electric supply and communication lines shall

conform to rules and regulations established in the 2012 2017 edition of the National

Electrical Safety Code which is adopted by reference. Copies of these regulations may

be obtained from the public service commission, state capitol, Bismarck, North Dakota

58505-0480.

History: Amended effective September 1, 1984; January 1, 1988; December 1, 1990; August 1, 1993; July 1, 1997; March 1, 2003; July 1, 2008; April 1, 2013; General Authority: NDCC 49-02-04

69-06-08, 69-09-02-35 Rule Changes PSC Case No. PU-16-775

Law Implemented: NDCC 49-02-04, 49-20-02

CHAPTER 69-09-09

WIND TURBINE FACILITY DECOMMISSIONING

Section

- 69-09-09-01 Definitions
- 69-09-09-02 Decommissioning Responsibility
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- 06-09-09-04 Decommissioning Period
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- 06-09-09-07 Existing Facilities
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- 06-09-09-09 Failure to Decommission

69-09-09-01. Definitions.

- 1. <u>"Capacity Factor" means the ratio of the actual output generated by</u> <u>a facility for a period of time, to the output that could be produced at</u> <u>the nameplate generating capacity of that facility.</u>
- 2. <u>"Certificate of Operation" means an affidavit executed by the Owner</u> certifying to the commission a facility's:
 - a. Nameplate generating capacity;
 - b. Annual capacity factor;
 - c. Annual MWh output; and
 - e. Monthly MWh output.
- 3. "Commercial wind energy conversion facility" means a wind energy

conversion facility of <u>with one or more wind turbines that has a total</u> <u>nameplate generating capacity</u> equal to or greater than five hundred kilowatts-in-total nameplate generating capacity.

- 2.4. "Commission" means the public service commission.
- 5. "Decommissioning Plan" means a plan filed with the commission that includes:
 - a. The anticipated life of the facility;
 - b. <u>A decommissioning cost estimate excluding salvage value of the</u> <u>turbines and equipment.</u>
 - <u>c.</u> <u>A description of the method used for determining the</u> <u>decommissioning cost estimate;</u>
 - <u>d.</u> <u>The anticipated manner in which the project will be</u> <u>decommissioned;</u>
 - e. A description of any expected effects on present and future natural resource development; and
 - <u>f.</u> <u>A detailed plan of financial assurance sufficient to ensure</u> <u>decommissioning.</u>
- 6. <u>"Existing facility" means a facility for which a certificate of site</u> compatibility has been issued prior to July 1, 2017.
- <u>"Facility" means a commercial wind energy conversion facility including</u> wind turbines, turbine towers, tower bases, blades, pad transformers, collector lines, substations, facility access roads, meteorology towers, and all areas disturbed by the construction, operation, maintenance or

decommissioning activities.

8. "Owner" means a person who has acquired a certificate of site

compatibility pursuant to North Dakota Century Code chapter 49-22.

3. "Wind turbine" means a wind turbine of equal to or greater than five

hundred-kilowatts-in-total-nameplate-generating-capacity.

History: Effective October 1, 2008; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27

69-09-09-02. Decommissioning responsibility.

The owner or operator of a commercial wind energy conversion facility is responsible for decommissioning that the facility and for all costs associated with decommissioning that facility and associated facilities.

History: Effective October 1, 2008; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27

69-09-03. Abandonment and useful life - certificate of operation.

A commercial wind energy-conversion facility or individual wind turbine is presumed to be at the end of its useful life if the facility or turbine generates no electricity for a continuing period of twenty-four months. The presumption may be rebutted by submitting to the commission for approval a plan outlining the steps and schedule for returning the commercial wind energy conversion facility or wind turbine to service.

 After construction of a facility is complete, the owner shall annually file a certificate of operation with the commission for that facility by February fifteenth of each year.

- 2. If no energy is generated by one or more wind turbines for the time period specified in the certificate of operation, a written explanation for the non-generating wind turbines must accompany the certificate of operation.
- 3. <u>A facility is presumed to be at the end of its useful life if its annual</u> capacity factor is less than ten percent.
- <u>4.</u> <u>A facility is presumed to be abandoned if, after commencement of construction and prior to completion, a period of twenty-four consecutive months has passed with no construction.</u>
- <u>A presumption under this section may be rebutted by filing a plan for</u>
 <u>commission approval outlining the steps and schedule for continuing</u>
 <u>construction or operation of the facility or wind turbine.</u>

History: Effective October 1, 2008; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27

69-09-09-04. Decommissioning period.

The facility owner or operator shall begin decommissioning a commercial wind energy conversion facility or wind turbine within eight months after the time the facility <u>abandonment</u> or turbine reaches the end of its useful life, as determined in section 69-09-09-03. Decommissioning must be completed within eighteen <u>twenty-four</u> months after the facility <u>abandonment</u> or turbine reaches the end of its useful life <u>unless the commission approves a plan specifying the steps and schedules to return the facility to operation</u>.

Chapter 69-09-09 Rule Changes PSC Case No. PU-17-23

History: Effective October 1, 2008; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27

69-09-09-05. Decommissioning requirements.

Decommissioning and site restoration includes: removal of surface read material and restoration of the reads and turbine sites to substantially the same physical condition that existed immediately before construction of the commercial wind energy conversion facility or wind turbine. The site must be restored and reclaimed to the same general topography that existed just prior to the beginning of the construction of the commercial wind energy conversion facility or wind turbine and with topsoil respread over the disturbed areas at a depth similar to that in existence prior to the disturbance. Areas disturbed by the construction of the facility and decommissioning activities must be graded, topsoiled, and reseeded according to natural resource conservation service technical guide recommendations and other agency recommendations, unless the landowner requests in writing that the access roads or other land surface areas be retained.

- <u>1.</u> <u>dismantling Dismantling and removal of all towers, turbine</u> generators, transformers, and overhead cables;
- <u>removal Removal of underground cables to a depth of twenty-four</u>
 [60.96 centimeters] inches;
- <u>3.</u> removal <u>Removal</u> of foundations, buildings, and ancillary equipment to a depth of:

<u>a.</u> three <u>Three</u> feet [91.44 centimeters] <u>for facilities constructed</u>

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before July 1, 2017; and

b. Four feet [121.92 centimeters] for facilities constructed on or after July 1, 2017;

<u>4.</u> Site restoration and reclamation to the approximate original topography that existed prior to construction of the facility with topsoil respread over the disturbed areas at a depth similar to that in existence prior to the disturbance; and

5. Grading and topsoiling of areas disturbed by the facility, and reseeding according to natural resource conservation service recommendations, unless the commission approves an owner request signed by the applicable landowner, identifying the surface features the landowner prefers to remain in place, and the reason the landowner prefers those features to remain.

History: Effective October 1, 2008; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27

69-09-09-06. Decommissioning plan.

Prior to the commencement of operation construction of a commercial wind energy conversion facility or wind turbine, the facility or turbine owner or operator shall file for commission review approval the estimated decommissioning cost per turbine, in current dollars at the time of filing, for the proposed facility or turbine and a comprehensive <u>a</u> decommissioning plan-that describes

any expected effect on present and -future natural resource development, and how the facility or turbine owner or operator plans to pay for decommissioning the facility or turbine as required by section 69-09-10-05 at the appropriate time <u>financial assurance</u>. The commission may at any time require the owner or operator of a commercial wind energy conversion facility or wind turbine to file areport with the commission describing how the facility or turbineowner or operator is fulfilling this obligation.

- 2. Commission shall make a determination on the decommissioning plan no later than six months after decommissioning plan is deemed complete by the commission.
- 3. <u>A decommissioning cost estimate for a facility:</u>
 - a. Must be made by a professional engineer licensed by the State of North Dakota and at the owner's expense;
 - <u>May include a decommissioning cost estimate including salvage</u>
 <u>value in addition to the decommissioning cost estimate excluding</u>
 <u>salvage value;</u>
 - <u>Must be updated and filed with the commission ten years after</u>
 <u>initial approval of the decommissioning plan, and then continue</u>
 <u>to be updated and filed with the commission every five years</u>
 <u>until decommissioning is complete.</u>
- <u>4.</u> The commission may at any time require the owner to file an updated decommissioning plan.

Chapter 69-09-09 Rule Changes PSC Case No. PU-17-23

History: Effective October 1, 2008; amended effective October 1, 2010; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27

69-09-09-07. Existing facilities.

Owners The owner and operators of an existing commercial wind energy conversion facilities facility shall file with the commission the information required in section 69-09-09-06 within one year after July 1, 2008 provide financial assurance after the tenth year of operation sufficient to complete decommissioning.

History: Effective October 1, 2008; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27

69-09-09-08. Financial assurance.

After the tenth year of operation of a commercial wind energy conversion facility or wind turbine, the commission by order may require the owner or operator to secure a performance bond, surety bond, letter of credit, corporate guarantee, or other form of financial assurance that is acceptable to the commission to cover the anticipated costs of decommissioning the commercial wind energy conversion facility or turbine. The commission may accept a corporate guarantee if the corporation has a tangible net worth of at least ten million dollars, a ratio of total liabilities to net worth of 2.5 or less, and a ratio of current assets to current liabilities of 1.2 or greater; or if it has an investment grade current rating for its most recent bond issuance of "Baa" or higher as issued by Moody's Investors Service "BBB" or higher as issued by Standard and Poor's Corporation, or an equivalent rating by any other nationally recognized statistical rating organization, as defined and approved by the United States securities and exchange commission.

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- 1. Prior to the commencement of construction of a facility, the owner shall provide financial assurance that is acceptable to the commission to ensure complete decommissioning.
- 2. Financial assurance may be in the form of a performance bond either as, or combination of, a surety bond, irrevocable letter of credit, selfguarantee, parent guarantee, or another form of financial assurance that is acceptable to the commission to cover the anticipated costs of decommissioning.
- 3. The commission may allow the owner to provide financial assurance through an incremental bond schedule. To be given consideration, an incremental bond schedule must include an initial bond increment prior to commencement of construction.
- 4. The commission may accept a self-guarantee or parent guarantee if:
 - <u>a.</u> The owner has been in continuous operation as a business entity for five years preceding the application. The commission may accept a self-guarantee with less than five years of continuous operation if guaranteed with a parent guarantee and the parent company has been in operation for at least five years preceding the application; and
 - <u>b.</u> The owner or parent guarantor has or is at least one of the following;
 - (1) A current rating of "A" or higher for its most recent bond

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issuance as issued by Moody's Investors Service, Standard and Poor's Corporation, or an equivalent rating by any other nationally recognized statistical rating organization, as defined and approved by the United States securities and exchange commission, that is acceptable to the commission;

- (2) <u>A tangible net worth of at least ten million dollars, a ratio</u> of total liabilities to net worth of 2.5 or less, and a ratio of current assets to current liability of 1.2 or greater; or
- (3) An electric public utility as defined by N.D.C.C. § 49-03-01.5(2).
- c.The total amount of an oufstanding self-guarantee for
decommissioning may not exceed twenty-five percent of the
owner's tangible net worth in the United States.
- <u>d.</u> <u>The combined total amount of an outstanding self-guarantee</u> <u>and parent guarantee for decommissioning may not exceed</u> <u>twenty-five percent of the owner's and parent guarantor's</u> <u>combined tangible net worth in the United States.</u>
- 5. If any financial assurance is modified, cancelled, suspended or revoked, the Owner shall immediately notify the commission and provide financial assurance as soon as practicable sufficient to ensure complete decommissioning.

<u>6.</u> The commission may require additional financial assurance upon a finding that the current financial assurance for a facility is not sufficient to ensure complete decommissioning.

History: Effective October 1, 2008; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27

69-09-09. Failure to decommission.

If the commercial wind energy conversion facility owner or operator does not complete decommissioning, the commission may take-such action as may be necessary to complete decommissioning, including requiring action to require forfeiture of the <u>a</u> bond. The entry into a participating landowner agreement shall constitute agreement and consent of the parties to the agreement, their respective heirs, successors, and assigns, that the commission may take such action as may be necessary to decommission a commercial wind energy conversion facility or wind turbine, including the exercise by the commission, commission staff, and their contractors of the right of ingress and egress for the purpose of decommissioning the commercial wind energy conversion facility.

History: Effective October 1, 2008; General Authority: NDCC 28-32-02, 49-02-27 Law Implemented: NDCC 49-02-27