

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

**Public Service Commission  
Public Utilities  
Rulemaking**

**Case No. PU-16-775**

**Public Service Commission  
Public Utilities - Wind Decommissioning  
Rulemaking**

**Case No. PU-17-23**

**ORDER SUBMITTING RULES TO ATTORNEY GENERAL**

**April 21, 2017**

**Appearances**

Commissioners Randy Christmann and Julie Fedorchak

**Preliminary Statement**

On January 18, 2017, the North Dakota Public Service Commission (Commission) issued a formal Notice of Intent to Amend Administrative Rules and Notice of Public Hearing and an Abbreviated Notice proposing to revise several sections of the North Dakota Administrative Code.

On January 23, 2017, the Commission issued a corrected formal Notice of Intent to Amend Administrative Rules and Notice of Public Hearing and a corrected Abbreviated Notice to reflect the correct date for receipt of comments.

The proposed rules are summarized as follows:

**Public Utilities – Case No. PU-16-775 – Sections 69-06-08-01 and 69-09-02-35:**

The Commission is proposing to amend North Dakota Administrative Code section 69-06-08-01 to add the impact on light sensitive land uses to the selection criteria, which must be at an acceptable minimum. The Commission is further proposing to add new policy criteria to allow preference to be given to wind energy projects that commit to installing light mitigation technology subject to commercial availability and Federal Aviation Administration approval.

The Commission is proposing to amend North Dakota Administrative Code section 69-09-02-35 to adopt the 2017 update to the National Electrical Safety Code.

## **Public Utilities - Wind Decommissioning – Case No. PU-17-23 – Chapter 69-09-09:**

The Commission is proposing to amend North Dakota Administrative Code chapter 69-09-09 to strengthen decommissioning requirements and require decommissioning plans to be filed for Commission approval prior to operation. A two-phased approach is being proposed for financial assurance with an initial financial assurance being provided prior to construction and financial assurance sufficient to ensure complete decommissioning to be provided prior to operation.

On January 19, 2017, Staff filed statements regarding the required regulatory analyses, small entity analyses, and takings assessments.

On January 20, 2017, the notices were forwarded to the Legislative Council for publication at least 30 days in advance of the hearing.

On January 23, 2017, corrected notices were forwarded to the Legislative Council for publication at least 30 days in advance of the hearing.

The Abbreviated Notice was published once in 52 official county newspapers the week of January 27 through February 2, 2017.

A public hearing was noticed for and held on February 27, 2017, beginning at 8:30 a.m., CST, in the Commission Hearing Room, 12th floor, State Capitol, Bismarck, North Dakota.

The Commission allowed, after the conclusion of the rulemaking hearing, a comment period until March 9, 2017, during which data, views, or oral arguments concerning the proposed rulemaking could be received by the Commission and made a part of the rulemaking record to be considered by the Commission.

### **Public Hearing and Comments**

Written and oral comments by Jerry Lein of Commission staff were received at the hearing. During the hearing, oral comments were submitted by David Shepard of Drake Lighting, Tom Carlson of EDF Renewable Energy, Jean Schafer of Basin Electric, Frank Costanza of Tradewind Energy, Inc., Chris Kunkle of Wind on the Wires, Julie Voeck of NextEra Energy Resources, Jay Doan, Jerry Doan, Wade Mills, and Andy Buntrock,

Written comments were submitted by: Enel Green Power North America, Inc. & Tradewind Energy, Inc. ("EGPNA"), Wind on the Wires ("WOW"), Basin Electric Power Cooperative ("Basin"), Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. ("MDU"), NextEra Energy Resources ("NextEra"), Tradewind Energy, Inc. ("Tradewind" if filed individually), Red Butte Wind, LLC. ("Red Butte"), Capital Power

Corporation ("Capital Power"), and Prairie Rose Realty, Inc. A number of citizens filed comments: Andy Buntrock, Durant Schiermeister, Jim Melchior, The Mills Family (Daymon & Lois Mills, Daymon Jr. & Lori Mills, Wade & Kerri Mills), Tricia Fossum, David and Vicki Carpenter, Mark Naaden, Alison Grotberg, Sue Haas Kleinsasser, Jay Doan, Jerry Doan, Jayce Doan.

All comments were reviewed and considered. Many of the comments received were relevant to wind development but did not address the rulemaking for which the Commission noticed and sought comments. The Commission will take these comments into consideration to advise the need for future rulemaking.

The following discusses the written and oral comments that were received.

### **Case No. PU-17-23: Wind Decommissioning**

The Commission proposed changes to N.D. Admin. Code Ch. 69-09-09. At the hearing Commission staff testified that over the last eight to nine years, North Dakota has seen a substantial number of commercial wind energy conversion facilities begin operation. The proposed rules are intended to strengthen the method of ensuring funds for decommissioning and restoration are available throughout the life of the project, heighten decommissioning requirements for future facilities, and allow the Commission to more effectively monitor the costs for decommissioning and restoration. The industry and concerned citizens expressed a number of concerns in their comments. These comments are addressed by section.

#### **69-09-09-01: Definitions**

##### **69-09-09-01(2) "Certificate of Operation"**

WOW commented that the Certificate of Operation may aggregate commercially sensitive information that could expose wind companies to a competitive disadvantage. It was suggested that the Commission may require that the report be confidential, thus giving the Commission the information they need while protecting the companies from exposing competitive information. It was further suggested that the company be only required to provide easily attainable information such as nameplate capacity and annual megawatt-hour output, and then provide an explanation why any turbines are not operational.

The revised proposed 69-09-09-01 in conjunction with 69-09-09-03(2) has been adjusted to provide that 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. However, the Certificate of Operation as proposed requires the remainder of information to be filed annually. This information is useful to the Commission for proper monitoring of use and

operation of the facility. If the information provided to the Commission may be protected, the company may request an application for protection of information and cite the law that may allow the Commission to prevent disclosure.

69-09-09-01(5) – “Construction”:

Red Butte requested the addition of a definition of “Construction” to clarify commencement of construction and requested that the definition excludes activities incident to preliminary engineering or environmental studies. This concern was echoed by EGPNA and WOW.

The revised proposed 69-09-09-01(5) has been modified to reflect these concerns, incorporating a “Construction” definition that excludes activities incident to preliminary engineering and environmental studies.

69-09-09-01(6) – “Decommissioning Plan” and Salvage Value:

The added definition for “Decommissioning Plan” requires the inclusion of a decommissioning cost estimate excluding salvage value of the turbines and equipment. EGPNA requested that the cost estimate included in the Decommissioning Plan not provide that the cost estimate be filed “excluding salvage value of the turbines and equipment,” due to the appearance that it creates a limitation for the Commission from considering decommissioning costs. WOW comments support the consideration of salvage value in the decommissioning cost estimate and seek to ensure that the Commission has flexibility to do so if it chooses.

David and Vicki Carpenter commented that reliance on and consideration of salvage value for decommissioning is not a realistic approach.

As written, the proposed rules allow the Commission discretion to consider the appropriate level and type of financial assurance to ensure complete decommissioning as described in N.D. Admin. Code 69-09-09-05. The proposed N.D. Admin. Code § 69-09-09-06(3)(a) provides that an owner may include an estimate in addition to the required cost estimate excluding salvage value. The price of salvage materials is subject to market price and often volatile. The Commission’s low confidence in the predictability of the market and consistency in salvage value over the length of a wind farm’s useful life may result in a reluctance to include a substantial salvage value being reduced from decommissioning costs<sup>1</sup>. The result is an absolute requirement to have a cost estimate with salvage value excluded, while allowing the owner the discretion to provide an additional estimate for consideration.

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<sup>1</sup> While many states do allow salvage value to be considered, the Commission would not be alone if it chose to not allow consideration of salvage value as part of the cost estimate. See e.g. Wyo. Admin. Code § ENV IS Ch. 1 s 9(e)(ii); Okla. Stat. Ann. tit. 17, § 160.15(B)(1)(a); NH ADC SITE 301.08(a)(8)(a).

#### 69-09-09-01(7) – “Existing facility”

MDU requested that “existing facility” definition be clarified so that the definition of “existing facility” be a facility for which a site compatibility certificate has been issued prior to July 1, 2017. MDU stated that this was to ensure that the conditions under which the certificate of site compatibility was issued not be modified prior to construction.

The proposed 69-09-09-01(7) defines “existing facility” as a facility for which a certificate of site compatibility has been issued prior to July 1, 2017. The decommissioning rules do not govern the certificate of site compatibility. They do reflect the manner in which a wind facility is decommissioned and the land is restored, and how an owner assures the Commission that it will be properly decommissioned.

#### 69-09-09-01(8) – “Owner”

EGPNA requests that the definition of “owner” be changed from a person who “has acquired” to “holds” a certificate of site compatibility for a facility.

To clarify that the definition is broad enough to cover a transfer of site certificate, the Commission has revised the proposed 69-09-09-01(8) to accommodate the request.

#### **69-09-09-03: Abandonment and useful life – Certificate of Operation**

##### 69-09-09-03(1) – the Certificate of Operation filing date

EGPNA requested the Certificate of Operation deadline be changed to at least March 31 (the end of the first quarter) to allow more time for submission and filing. The revised proposed 69-09-09-03(1) moves the filing date for a Certificate of Operation to the first of April to accommodate the requested time.

##### 69-09-09-03(3) – the ten percent capacity factor for end of useful life

A number of comments were received regarding the proposal that there be a rebuttable presumption that a facility is at the end of its useful life if its annual capacity factor was less than ten percent.

EGPNA, WOW, MDU, NextEra and Red Butte requested that the rebuttable presumption for the end of useful life remain as “generates no electricity for a continuing period of 24 months.” The companies claim that the ten percent is an arbitrary number and that it does not account for changing market conditions such as regional transmission organization (RTO) operating rule changes, or catastrophic and force majeure events. NextEra questioned the need for the ten percent threshold due to the

owner likely losing money below a ten percent capacity factor level, and not receiving any financial benefit from delaying decommissioning.

The Commission disagrees with the assessment of ten percent being an arbitrary number. However, it is agreeable to extending the minimum annual capacity factor of ten percent to two consecutive years. As Commission Staff's comments reflect, modern North Dakota wind projects operate in the range of a 50 percent capacity factor. Ten percent is a conservative assessment. Furthermore, the events of concern are of the sort that may result in an early end of useful life. As commented by NextEra, a facility operating at less than a ten percent capacity factor level is unprofitable. Having the annual capacity factor threshold at ten percent for two consecutive years will allow the Commission to monitor the financial health of an owner and whether the facility is distressed after an unforeseen event.

Extending the ten percent minimum capacity factor to two consecutive years provides an opportunity to restore the facility to operation even with an extended maintenance issue or after a catastrophic event. If an owner is unable to reach the ten percent capacity factor but has a plan to get the facility back to useful operation, the presumption may be rebutted. The revised proposed 69-09-09-03(3) has been modified to reflect the change.

#### **69-09-09-04 – Decommissioning Period**

EGPNA requested that minor revisions be made to “tie the triggers for decommissioning . . . 69-09-09-03, which is in the current rule.” Basin requested the time frame for decommissioning be moved from eight months to 12 months to allow for weather delays.

The Commission agrees with the extending of the decommissioning time to 12 months and the proposed rule is revised accordingly. With regards to EGPNA's request to tie the triggers for decommissioning 69-09-09-03, the Commission has given it consideration, but will not be incorporating the request during this rulemaking.

#### **69-09-09-05 Decommissioning requirements**

##### **69-09-09-05(2) Removal of Cables**

Concerned citizens commented on the depth of the cable removal. Jim Melchior commented that all waste should be removed to a depth of 8 feet. The Mills family disagreed and commented that removal to any depth should not be required and would do more harm to the native grasslands than if just left in the ground.

At this time, the Commission is not proposing a change to 69-09-09-05(2). The Commission will take this into consideration for future rulemaking.

### 69-09-09-05(3) Removal of foundations

Proposed 69-09-09-05(3) increases the depth of removal of foundations, buildings and ancillary equipment from three feet to four feet for facilities constructed after July 1, 2017. Commission staff commented that the purpose is to provide further protections against possible conflicts with future surface usage.

A number of comments were received by concerned citizens. Jim Melchior's comments related to foundations as well as cables and suggested that all waste be removed to 8 feet. Alison Grotberg commented that removal of concrete to 8 or 9 feet would be adequate for future development. Jayce, Jay, and Jerry Doan and David and Vicki Carpenter support removal of all concrete to accommodate future wells, water lines, fences, and buildings. At the hearing, Jerry and Jay Doan stated that complete removal would be appropriate for proper utilization of the land for the next generation and subsequent owners. Jerry Doan also noted that water lines are often dropped to an eight feet depth.

These concerns have been considered by the Commission and may be revisited in subsequent rulemaking. For the purposes of the current rulemaking, the Commission's proposed 69-09-09-05(3) depth of removal will remain as a step-up to four feet after July 1, 2017.

### 69-09-09-05(5) Landowner approval to retain surface features

Julie Voeck of NextEra commented at the hearing and MDU provided written comments that landowner preference should be given consideration for specifics of lease agreements regarding restoration and reclamation to original topography and that landowners should have the choice to keep changes to their property.

Proposed 69-09-09-05(5) allows that an owner request signed by the applicable landowner to retain surface features will be considered. The Commission approval requirement will prevent an owner from circumventing decommissioning requirements that have no beneficial use to the landowner.

## **69-09-09-06 Decommissioning Plan**

### 69-09-09-06(1) and (2) – Decommissioning plan approval

As originally noticed by the Commission, the proposed rules required an owner to have an approved decommissioning plan prior to commencement of construction and allowed the Commission six months to make a determination on the decommissioning

plan. The six month period to make a determination was intended to allow the time frame to run with the siting approval period and incentivize concurrent filings.

EGPNA commented that the decommissioning plan being filed concurrently with the siting approval would lead to an inaccurate cost estimate. Instead, EGPNA suggested a two-phase approach for financial assurances be adopted and allow the decommissioning plan to be filed prior to operation. The suggested two-phase approach would provide an initial construction phase financial assurance of ten percent of the construction costs. Upon completion of construction, the initial financial assurance will be released and replaced upon receipt of a second financial assurance adequate for full decommissioning during the operation phase. This would allow for the Commission to have adequate financial assurances in place prior to having a decommissioning plan and streamline the process to get a wind facility operational.

WOW expressed concerns that the plan's timeline may interfere with wind development. WOW stated that the "PSC should ensure that the decommissioning plan is considered simultaneously with the site compatibility permit, instead of handing two approvals in the series, thus extending the timeline for construction." They also had concerns that even if this is done, the decommissioning plan may not be reasonably accurate at the time and a lengthy lead time may possibly result in unnecessary delay of project construction. WOW also suggested a tightening of the six month timeframe.

The Commission considered the two-phase approach to financial assurances and the timing of the decommissioning plan. The Commission agrees that a two-phase approach will be appropriate to ensuring proper decommissioning. In applying the change to a two phase financial assurance plan, the revised proposed 69-09-09-06(1) requires the decommissioning plan to be approved prior to operation of the facility, and the revised proposed 69-09-09-06(2) shortens the period for the Commission to make a determination to sixty days after the decommissioning plan is deemed complete.

#### 69-09-09-06(3) Decommissioning Cost Estimate

The proposed 69-09-09-06(3) requires cost estimates to be made by a professional engineer. MDU commented that they develop decommissioning cost estimates in-house and that requiring a professional engineer could increase costs. Instead, MDU suggests qualifications of an engineer be provided for the Commission to accept or reject. At the hearing, Frank Costanza of Tradewind supported the licensed professional engineer requirement.

Proposed 69-09-09-06(3) will continue to require a professional engineer licensed by the State of North Dakota. The qualifications of an engineer is better assessed by the State Board of Registration for Professional Engineers and Land Surveyors for the purposes of administration of decommissioning.

## **69-09-09-08 Financial Assurance**

### **69-09-09-08(1) Financial assurance requirement time**

The proposed 69-09-09-08(1) required the owner to have financial assurance sufficient for complete decommissioning prior to the commencement of construction.

EGPNA commented that a requirement of financial assurances after year ten of operations should be sufficient due to minimal risk of failed decommissioning and project financing. However, they recognized the Commission's concerns and commented that the two-phased financial assurance structure with an initial financial assurance of ten percent of construction costs during the construction phase should be sufficient to alleviate the Commission's concerns. Red Butte commented in support of the two-phased approach and believes it will simplify the process for the owner and the Commission. For the construction phase, Red Butte suggested that a \$60,000 per turbine financial assurance will be sufficient as an alternative to the ten percent of construction costs.

WOW commented that requiring financial assurances prior to construction is an unnecessary burden on the companies, but supports an incremental or phased in approach. Capital Power commented in support of WOW and opposes the financial assurance prior to construction as an unnecessary economic burden and runs counter to industry norms.

Jayce, Jay, and Jerry Doan, Andy and KariAnn Buntrock, and Mark Naaden support financial assurances prior to the commencement of construction.

The Commission agrees that the two-phased approach is appropriate for financial assurance and a streamlined process. After reviewing the cost of construction of past projects in North Dakota, the revised proposed 69-09-09-08(1) will require an initial financial assurance equal to five percent of the estimated cost of construction in case of abandonment, prior to commencement of construction. The revised proposed 69-09-09-08(2) requires financial assurance sufficient to ensure complete decommissioning prior to the commencement of operation of a facility.

### **69-09-09-08(1) Types of financial assurance – local bonding**

EGPNA, WOW and NextEra request that local bonding be considered as a financial assurance. The companies state that it would double the cost of providing financial assurance without providing any public benefit.

The Commission believes its rules retain the discretion to take local bonding into consideration. However, to what extent the local bond will be taken into consideration

will depend heavily on the Commission being able to ensure that complete decommissioning will occur.

#### 69-09-09-08(4) Incremental Bond Schedule

EGPNA requested an incremental bond schedule be implemented with a 25% initial bond, 25% addition after five years, and the remaining 50% be provided after ten years. Red Butte also requested 69-09-09-08(2) be changed to allow bonding to be implemented on an incremental basis of ten percent per year. Capital Power agreed that a phased in approach is appropriate. The Mills family commented that financial assurance should be incremental rather than require all financial assurance up front.

Proposed 69-09-09-08(4) provides the Commission discretion to consider financial assurance on an incremental basis.

#### 69-09-09-08(5)(a) Self guarantee "at least"

Red Butte requests the removal of "at least" from 69-09-09-08(5)(b) because it implies that the Commission could impose a more stringent owner or parent guarantor requirement than are set forth in the proposed rule.

The Commission agrees with the removal of "at least" as it adds no meaning to the rule. Revised proposed 69-09-09-08(4) grants that the Commission "may" require more stringent standards, or the discretion to not accept a self-guarantee.

#### 69-09-09-08(5)(b) Credit rating

The noticed proposed rules increased the "BBB-" or higher bond rating to an "A" category or higher. Commission staff commented that the heightened financial assurance requirements mirror those of the Office of Surface Mining and Reclamation Enforcement (OSM) for coal mine reclamation and ensure that only the most sound owners are allowed to self or parent guarantee.

Tricia Fossum and Andy and KariAnn Buntrock commented in favor of sound financial assurances. The Buntrocks commented that owners should be held accountable to the same standards as other industries. At the hearing, Jerry Doan commented that "A" rated bonds are needed for reclamation, similar to other industries.

The Mills family testified that the "A" rating requirement should be changed to investment grade.

NextEra commented that the credit rating should be changed to "investment grade." Investment grade credit ratings are considered low risk. The "A" credit rating is the highest among industry participants and NextEra was not aware of any major

market participants with an issuer credit rating of “A”. Without specifying a credit rating at the high end of the investment grade range, investment grade is adequate to accomplish the Commission’s goal without imposing unnecessary costs on wind facility owners. WOW and Capital Power both requested that the minimum bond rating remains at “BBB-“ or have the language changed to investment grade. Capital Power commented that “investment grade” is consistent with most electric power markets, including MISO.

Basin suggested minor revisions for clarification that the “A” rating was meant to encompass the whole “A” category, as well as clarification that the Commission would accept the higher of multiple rating organizations if there is a split. NextEra also commented that different types of credit ratings exist and that credit ratings also provide issuer ratings, which indicate an overall credit risk. NextEra requested that the language be revised to include issuer ratings.

The Commission has considered the comments regarding credit and bond ratings and has chosen to retain the “A” grade rating while incorporating the minor revisions suggested by Basin and NextEra’s issuer rating addition revision. The Commission has maintained a successful mining and reclamation program, which requires an “A” bond rating for self-bonding. Pursuant to this success, the Commission has chosen to follow OSM’s proposal with regards to wind farm decommissioning<sup>2</sup>. OSM’s standards were based upon a finding that the top three ratings of Standard and Poor’s and Moody’s Investor Service would better assure that the company applying for self-bonding would be able to survive in depressed economic conditions. “A” review of Corporate Credit Ratings, demonstrate a low default for investment grade, however, even “AA” or “A” ratings “should not be seen as a guarantee of capital markets access.”<sup>3</sup>

To ensure that only the most sound owners are allowed to self or parent guarantee, the revised proposed 69-09-09-08(5) retains the “A” rating standard while incorporating the minor revisions to allow for issuer credit ratings and accommodate Basin’s requested clarifications.

### **PU-16-775 Siting Criteria**

#### **69-06-08-01(5)(c)**

Staff commented that the proposed changes are to update and codify the Commission’s existing energy conversion facility criteria to add the impact on light-sensitive land uses to the selection criteria, which must be at an acceptable minimum.

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<sup>2</sup> What Additional Requirements Apply to Self-Bonds, 30 C.F.R. § 800.23. *See also* PSC Docket No. 48.

<sup>3</sup> Corporate Credit Ratings – A Quick Guide. PSC Docket No. 47.

WOW suggests that the proposal is unnecessary, but if kept, additional clarification from the Commission would be preferred.

Proposed 69-06-08-01(5) retains the addition of "light-sensitive land uses." N.D.C.C. § 49-22-05.1 states that the Commission shall develop criteria to guide the suitability evaluation and designation process. The addition of the criteria puts an applicant on notice that the effects of light will be evaluated for the purposes of their application and hearing.

69-06-08-01(6)(n)

The proposed 69-06-08-01(6)(n) added a new policy criteria to allow preference to be given to wind energy projects that commit to installing aircraft detection lighting systems subject to Federal Aviation Administration (FAA) approval. Commission staff commented that the aircraft detection and lighting systems are a new technology coming available that uses radar to detect when an aircraft is in the vicinity so the flashing lights can be turned on only when needed. The Commission is already giving consideration to the use of aircraft detection and lighting systems. The rule changes would codify the existing practice.

WOW requested that the Commission allow other technologies designed to mitigate lighting impacts to be considered, such as light intensity dimming solutions (LIDS) to allow for flexibility. Drake Lighting, EGPNA, and MDU agreed that the requirements should be technology neutral.

EGPNA requested the addition of "to use commercially reasonable efforts" and "subject to FAA-approved system" instead of a hard requirement to implement the technology. EGPNA's concern is due to the limited commercial availability of the systems if they become widespread and or unable to secure a FAA approval, or that it may be financially untenable to do so. MDU commented that it should only apply to prospective cases going forward.

There was an overwhelming support from concerned citizens in favor of lighting system rules. Tricia Fossum, David and Vicki Carpenter, Mark Naaden, Jim Melchior, Durant Schiermeister, Sue Hass Kleinsasser, Andy Buntrock, and the Mills Family all commented in support of the changes. In general, the citizens indicated the light pollution from the wind turbines were littering the night sky and that less intrusive technology should be implemented. The Mills Family stated that LIDS should be preferred over radar due to the expense on existing wind farms.

In consideration of the concerns of the industry, revised proposed 69-06-08-01(6)(n) has been modified to be technology neutral and subject to commercial availability in addition to the FAA approval.

69-09-02-35 – Installation and maintenance

Proposed 69-09-02-35 updates the rules and regulations for the installation and maintenance of electric supply and communication lines. The purpose of the adopting the 2017 Edition is to ensure that North Dakota safety requirements keep pace with industry standards. Aside from Staff testimony, no comments were received.

Proposed 69-09-02-35 updates the National Electrical Safety Code from 2012 to 2017.

**Discussion**

The Commission agrees with adopting the rules as revised.

Having reviewed the proposed revised rules and the testimony and comments received, the Commission finds good cause for submitting the revised proposed rules, attached to and made a part of this order, to the Attorney General for an opinion as to legality.

**Order**

The Commission orders the revised proposed changes to the North Dakota Administrative Code, as attached to and made a part of this order, be submitted to the Attorney General for an opinion that the rules are approved as to their legality.

**PUBLIC SERVICE COMMISSION**



**Brian Kroshus**  
Commissioner



**Randy Christmann**  
Chairman



**Julie Fedorchak**  
Commissioner

**NORTH DAKOTA**

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**Case No. PU-16-775**

**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. 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.
- h. 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:
  - (1) 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;
- (3) 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 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.
  - (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.

(~~34~~) Rural residences and businesses.

(~~45~~) Aquifers.

(~~56~~) Human health and safety.

(~~67~~) Animal health and safety.

(~~78~~) Plant life.

(~~89~~) Temporary and permanent housing.

(~~910~~) 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;\_\_\_\_\_.

**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

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

NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Public Service Commission  
Public Utilities - Wind Decommissioning  
Rulemaking

Case No. PU-17-23

CHAPTER 69-09-09

WIND TURBINE FACILITY DECOMMISSIONING

Section

69-09-09-01	Definitions
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**69-09-09-01. Definitions.**

1. ~~"Commercial wind energy conversion facility" means a wind energy conversion facility of equal to or greater than five hundred kilowatts in total nameplate generating capacity.~~ "Capacity Factor" means the ratio of the actual output generated by a facility for a period of time, to the output that could be produced at the nameplate generating capacity of that facility.

2. "Commission" means the public service commission. "Certificate of Operation" means an affidavit executed by the Owner certifying to the commission a facility's:
  - a. Nameplate generating capacity;
  - b. Annual capacity factor;
  - c. Annual MWh output; and
  - d. Monthly MWh output.
3. "Wind turbine" means a wind turbine of equal to or greater than five hundred kilowatts in total nameplate generating capacity. "Commercial wind energy conversion facility" means a wind energy conversion facility with one or more wind turbines that has a total nameplate generating capacity equal to or greater than five hundred kilowatts.
4. "Commission" means the public service commission.
5. "Construction" means any clearing of land, excavation, or other action that would affect the environment of the site of a facility, but does not include activities incident to preliminary engineering or environmental studies.
6. "Decommissioning Plan" means a plan filed with the commission that includes:
  - a. The anticipated life of the facility;
  - b. A decommissioning cost estimate excluding salvage value of the turbines and equipment;

- c. A description of the method used for determining the decommissioning cost estimate;
  - d. The anticipated manner in which the project will be decommissioned;
  - e. A description of any expected effects on present and future natural resource development; and
  - f. A detailed plan of financial assurance sufficient to ensure decommissioning.
7. "Existing facility" means a facility for which a certificate of site compatibility has been issued prior to July 1, 2017.
8. "Facility" means a commercial wind energy conversion facility including 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.
9. "Owner" means a person who holds a certificate of site compatibility pursuant to North Dakota Century Code chapter 49-22.

**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

**69-09-09-03. UsefulAbandonment 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.~~

1. After construction of a facility is complete, the owner shall annually file a certificate of operation with the commission for that facility by the first of April of each year.
2. If no energy is generated by one of 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. A facility is presumed to be at the end of its useful life if its annual capacity factor is less than ten percent for two consecutive years.
4. 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 significant construction.
5. A presumption under this section may be rebutted by filing a plan for

commission approval outlining the steps and schedule for continuing  
construction or operation of the facility or wind turbine.

**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~~twelve months after the time the facility ~~abandonment~~ or turbine reaches the end of its useful life, as determined in section ~~69-09-09-03~~. Decommissioning must be completed within ~~eighteen~~twenty-four months after the facility ~~abandonment~~ or turbine reaches the end of its useful life unless the commission approves a plan specifying the steps and schedules to return the facility to operation.

**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:

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

a. ~~three~~Three feet [91.44 centimeters] for facilities constructed before July 1, 2017; and

b. ~~removal of surface road material and restoration of the roads 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.~~Four feet [121.92 centimeters] for facilities constructed on or after July 1, 2017;

4. 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 topsoil 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 commencement of operation of a commercial wind energy conversion facility or wind turbine, the facility or turbine owner or operator shall file for commission review the estimated decommissioning cost per turbine, in current dollars at the time of filing, for the proposed facility or turbine and a comprehensive 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. The commission may at any time require the owner or operator of a commercial wind energy conversion facility or wind turbine to file a report with the commission describing how the facility or turbine owner or operator is fulfilling this obligation.~~

1. Prior to the commencement of operation of a facility, the owner must have an approved decommissioning plan.

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

**History:** Effective October 1, 2008; amended effective October 1, 2010; amended effective \_\_\_\_\_.

**General Authority:** NDCC 28-32-02, 49-02-27

**Law Implemented:** NDCC 49-02-27

**69-09-09-07. Existing facilities.**

~~Owners and operators of existing commercial wind energy conversion facilities shall file with the commission the information required in section 69-09-09-06 within one year after July 1, 2008. The owner of an existing facility shall 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.~~

1. Prior to commencement of construction of a facility, the owner shall provide financial assurance equal to five percent of the estimated cost of construction of the facility that may be used to decommission the facility in the event it is abandoned prior to operation. Within sixty days of receipt of written notice from the owner that the facility is commercially operational, the commission shall return or release said financial assurance provided to

the commission.

2. Prior to commencement of operation of a facility, the owner shall provide financial assurance that is acceptable to the commission and sufficient to ensure complete decommissioning.
3. Financial assurance may be in the form of a performance bond either as, or combination of, a surety bond, irrevocable letter of credit, self-guarantee, parent guarantee, or another form of financial assurance that is acceptable to the commission to cover the anticipated costs of decommissioning.
4. 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 operation.
5. The commission may accept a self-guarantee or parent guarantee if:
  - a. 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
  - b. The owner or parent guarantor has or is one of the following:

- (1) A current rating in the "A" category or higher for its most recent bond issuance or issuer rating 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. If an organization has different ratings among various rating organizations, the commission shall accept the higher of the ratings;
- (2) 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 liability of 1.2 or greater; or
- (3) An electric public utility as defined by N.D.C.C. § 49-03-01.5(2).

6. The total amount of an outstanding self-guarantee for decommissioning may not exceed twenty-five percent of the owner's tangible net worth in the United States.

7. The combined total amount of an outstanding self-guarantee and parent guarantee for decommissioning may not exceed twenty-five percent of the owner's and parent guarantor's combined tangible net worth in the United States.

8. 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.
9. 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

**69-09-09-09. 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 a 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