

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

**Public Service Commission
Solar Decommissioning
Rulemaking**

Case No. PU-19-122

**Public Service Commission
Pipeline Safety
Rulemaking**

Case No. GS-19-217

**Public Service Commission
Energy Conversion Facility Siting Criteria
Rulemaking**

Case No. PU-19-290

**Public Service Commission
Wind Decommissioning
Rulemaking**

Case No. PU-19-291

ORDER SUBMITTING RULES TO ATTORNEY GENERAL

March 18, 2020

Appearances

Commissioners Brian Kroshus, Julie Fedorchak, and Randy Christmann

Preliminary Statement

On August 6, 2019, the North Dakota Public Service Commission (Commission) issued a formal Notice of Intent to Amend Administrative Rules and Notice of Public Hearing and Abbreviated Notice of Intent to Amend Administrative Rules and Notice of Public Hearing, proposing to create new Chapter 69-09-10, proposing to amend Section 69-09-03-02, amend Section 69-06-08-01, and amend Chapter 69-09-09 of the North Dakota Administrative Code.

On August 6 and August 9, 2019, Staff filed statements regarding the required regulatory analysis, small entity analysis, and takings assessments.

On August 7, 2019, the Commission forwarded the notices to the Legislative Council for publication at least 30 days in advance of the hearing.

The Abbreviated Notice was published once in each of the 52 official county newspapers in the state during the weeks of August 14 through August 20, 2019.

25	PU-19-291	Filed 03/18/2020	Pages: 42	15	GS-19-217	Filed 03/18/2020	Pages: 42
	Order Submitting Rules to Attorney General				Order Submitting Rules to Attorney General		
	Public Service Commission				Public Service Commission		
27	PU-19-290	Filed 03/18/2020	Pages: 42	21	PU-19-122	Filed 03/18/2020	Pages: 42
	Order Submitting Rules to Attorney General				Order Submitting Rules to Attorney General		
	Public Service Commission				Public Service Commission		

On September 19, 2019, the Commission held the public hearing as noticed, beginning at 1:30 p.m., CST, in the Commission Hearing Room, 12th floor, State Capitol, Bismarck, North Dakota.

The Commission allowed a comment period until September 30, 2019, during which the Commission received and considered data, views, or written or oral comments concerning the proposed rulemaking as part of the rulemaking record.

The proposed rules and amendments are summarized as follows:

Case No. PU-19-122 - Proposed New Chapter 69-09-10 - Solar Facility Decommissioning

The purpose of the proposed new chapter 69-09-10 is to implement changes from S.B. No. 2100 enacted during the most recent legislative session concerning renewable energy conversion facility decommissioning. The Commission is proposing to create a new chapter to the North Dakota Administrative Code, Chapter 69-09-10 regarding Solar Facility Decommissioning. The proposed chapter is expected to have an impact on the regulated community in excess of \$50,000.

Case No. GS-19-217 - Proposed Amendments to Section 69-09-03-02 – Pipeline Safety

The purpose of this amendment is to adopt by reference the most recent amendments to pipeline safety regulations adopted by the United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA). This rule change adopts amendments to safety regulations that have been adopted by PHMSA since December 31, 2017, current to July 31, 2019. The proposed change is not expected to have an impact on the regulated community in excess of \$50,000.

Case No. PU-19-290 – Proposed Amendments to Section 69-06-08-01 - Energy Conversion Facility Siting Criteria

The purpose of the amendments is to address concerns related to the impact of energy conversion facilities on military and department of defense operations and to re-evaluate the acceptable sound level of a wind facility from an inhabited residence or community building that has not signed a waiver. The proposed amendment is not expected to have an impact on the regulated community in excess of \$50,000.

Case No. PU-19-291 – Chapter 69-09-09 - Wind Facility Decommissioning

The purpose of the amendments is to clarify that decommissioning and financial assurance requirements apply to all wind facilities generating more than five hundred kilowatts that have not been granted a waiver by the Commission. The proposed rule is expected to have an impact on the regulated community in excess of \$50,000.

Public Hearing and Comments

The Commission reviewed and considered all comments. The written and oral comments that were received are summarized and discussed below by case number. The Commission received a number of comments that were unrelated to the current rulemaking or the Commission's jurisdiction, or were for providing information to the Commission. The Commission appreciates the information and participation, but they may not be directly discussed in the following summary.

Case No. PU-19-122 - Proposed New Chapter 69-09-10 - Solar Facility Decommissioning

Written comments were provided by Lightspring, LLC ("Lightspring"), Northwest Landowner's Association ("Northwest"), and Montana-Dakota Utilities Co. ("Montana-Dakota"). Written and oral comments were provided by Commission Staff and Apex Clean Energy ("Apex").

The following is a summary of the comments provided regarding Solar Facility Decommissioning.

69-09-10-01: Solar Facility Decommissioning Size Threshold

Proposed N.D. Admin. Code § 69-09-10-01(3) defines a commercial solar energy conversion facility as a project with a total nameplate generating capacity equal to or greater than five hundred kilowatts (kW). A facility with a nameplate generation capacity equal to or greater than five hundred kW would be subject to the Commission's decommissioning and financial assurance requirements. Proposed N.D. Admin. Code § 69-09-10-10 provides that the Commission may grant a waiver of many of the decommissioning plan and financial assurance requirements for a project with a nameplate generating capacity of less than 5 megawatts (MW).

Apex commented that a different threshold for decommissioning and siting permitting may cause confusion within the regulated community and political subdivisions.¹ Apex recommended that the Commission set the threshold for decommissioning requirements at fifty MW, or amend the waiver provision to allow the Commission to grant a waiver for a project up to fifty MW.

¹ Pursuant to N.D.C.C. ch. 49-22, a company may not begin construction of an electric energy conversion facility that exceeds fifty MW of electricity without first having obtained a site certificate.

LightSpring recommended that the decommissioning threshold be set at fifty MW or higher to maintain consistency with the Siting Act.

The hearing record and the Commission's experience with solar facility siting provides that a low MW facility may result in impacts to a large footprint.² Therefore it is in the public interest for the Commission to retain authority to require decommissioning and financial assurances for projects equal to or greater than five hundred kW. The industry is sufficiently sophisticated to recognize two size thresholds: one to receive a siting permit, and one to ensure decommissioning. Proposed N.D. Admin. Code § 69-09-10-10 allows the owner to request a waiver of decommissioning requirements for facilities up to five MW.

69-09-10-01(8): Facility Definition:

Montana-Dakota recommended inverters be added to the definition of "Facility" under N.D. Admin. Code § 69-09-10-01(8).

The Commission considered the recommendation, but the definition of "Facility" is not meant to be exhaustive. The Commission may revisit this in a future rulemaking if further clarification is needed. At this time, the Commission proposes to adopt this section consistent with N.D. Admin. Code ch. 69-09-09 without modification.

69-09-10-03: Abandonment and Useful Life

The Proposed N.D. Admin. Code § 69-09-10-03 provides that a certificate of operation must be annually filed with the Commission and codifies presumptions regarding abandonment and end of useful life of the facility. Proposed N.D. Admin. Code § 69-09-10-03(2) provides that 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.

Montana-Dakota commented that North Dakota solar facilities are expected to have an eighteen percent annual capacity factor. Due to the lower capacity factor, Montana-Dakota recommended a five percent annual capacity factor for two consecutive years to create the presumption of end of useful life.

Apex commented that solar facilities have a lower capacity factor than solar facilities. As a result, the capacity factor may fall below ten percent after thirty years of operation and as efficiency declines. Apex recommended tying end of useful life to lease payments, or in the alternative, reducing the capacity factor.

² During the rulemaking hearing, it was discussed that one MW of solar generation may require up to eight acres of footprint. The resulting calculation may result in an impact to three hundred and ninety-two acres for forty-nine MW of solar generation.

Lightspring expressed concern with the capacity factor, but disagreed with Apex's recommendation of tying the useful life to lease payments. Based upon these comments, Lightspring supported alteration of the rules to state that a facility is "presumed to be at the end of its useful life if its annual capacity factor is less than ten percent of its original capacity factor for two consecutive years."

The Commission continues to refrain from basing its decisions upon what is contained in private negotiations and leases and considers annual capacity factor to be a clear and simple baseline to evaluate the functional use of a project. Based upon the Commission's understanding of solar capacity factors and degradation of most photovoltaic facilities, the Commission considers a five percent annual capacity for a period of two years to be low, particularly when the administrative code allows an owner receive approval for continued operation of the facility from the Commission in spite of a presumption of abandonment.

However, recognizing that solar generation is in early development in North Dakota, the Commission finds that conservatively modifying Proposed N.D. Admin. Code § 69-09-10-03(2) to lower the annual capacity factor for a period of two years from ten MW to five MW as a reasonable request until additional data is developed regarding solar operations in North Dakota.

69-09-10-05: Decommissioning Requirements

Montana-Dakota recommended the inclusion of inverters, transformers, and substations to N.D. Admin. Code § 69-09-10-05; however, it recommended leaving the transformers and substations as optional due to the possibility of continued use after facility decommissioning. Montana-Dakota also recommended that foundation depth of removal be added and that an exemption be added to address landowner preference or lease arrangements.

As with the definition of "facility", the Commission does not view the list of decommissioning items as exhaustive, but will provide these changes for additional clarity. The Commission agrees that Montana-Dakota's recommendation for allowing flexibility in the decommissioning process to accommodate landowner requests is a good one. To accommodate this recommendation, Proposed N.D. Admin. Code § 69-09-10-05 is revised to allow for a waiver of a decommissioning requirement upon receipt of a request signed by a landowner and a finding of good cause that the requirement be waived.

The Commission also revises Proposed N.D. Admin. Code § 69-09-10-05 to provide a depth of removal for anchors, pilings, foundations, buildings, and ancillary equipment to a depth of four feet. Due to the similar concerns and the similarity between the wind and solar decommissioning rules, the Commission also revises the wind decommissioning rules to maintain consistency.

Lightspring recommended that the Commission allow the industry to continue to determine the best practices for foundation and piling removal over the next three years and to implement removal guidelines once more data has been received and practices have been established.

Given the legal applicability of administrative rules and the time it takes to promulgate and publish rules, the Commission will decline this recommendation. Although the Commission may change the decommissioning requirements as the industry develops, these rules are intended to provide some baseline guidance.

Northwest recommended modifying the requirement of removal of underground cables to a depth of twenty-four inches to remove all cables unless agreed to in writing by the landowner. Northwest asserts that cables interfere with the installation of drain tile for future landowners. Northwest also suggested language requiring the restoration of productive topsoil and set a baseline by referencing surrounding undisturbed areas, as is done with coal and oil. Northwest expressed that the uniformity would assist landowners in protecting their land as they negotiate private agreements by setting a general expectation across industries.

The Commission agrees that the recommendations set forth by Northwest are good practices; however, the Commission is going to decline modifications based on Northwest's recommendations at this time. The Commission has generally taken a baseline approach to decommissioning to ensure that the public is protected, but allow the flexibility for the companies and landowners to negotiate more rigorous standards. The Commission will take these recommendations under advisement for future rulemakings where additional notice to interested parties is provided.

69-09-10-06: Decommissioning Plan

Apex recommended the inclusion of salvage value for the decommissioning cost estimate to align with industry best practices. Apex commented that the updated cost estimate every five years will ensure up-to-date assumptions for pricing and the exclusion of the value will inflate decommissioning costs and result in an unnecessary obligation on the owner.

Proposed N.D. Admin. Code § 69-09-10-06 allows the Commission discretion to consider the appropriate level and type of financial assurance to ensure complete decommissioning. An owner may provide an estimate including salvage value in addition to a cost estimate that excludes salvage value for consideration. However, the price of salvage materials is subject to market price and is often volatile. This does create a reluctance within the Commission to accept a financial assurance based upon an estimate that includes salvage value. For ease of administration, it is preferred to maintain consistency with the current wind decommissioning rules.

Having considered the comments, Commission proposes to adopt this section without revision.

Montana-Dakota recommended that N.D. Admin. Code § 69-09-10-06(3)(a) be modified to allow the cost estimate be done by a qualified contractor with experience in facility decommissioning, instead of solely by a professional engineer licensed by the state of North Dakota.

This recommendation is similar to the one provided by Montana-Dakota during the promulgation of the wind decommissioning rules³ which did not result in revisions during that rulemaking process. To maintain consistent with wind decommissioning, the Commission will continue to require a professional engineer to provide the cost estimate at this time.

Having considered the comments, the Commission adopts this section without revision.

69-09-10-08: Financial Assurance

Apex expressed a number of concerns with N.D. Admin. Code § 69-09-10-08. Apex requested the inclusion of 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” (financial metrics) as an option that allows an owner to request that the Commission accept a parent guarantee. Apex expressed that this preserves flexibility to account for various business models.

Apex also requested that the proposed rules be revised to limit the Commission from requiring additional financial assurance upon a finding that it is not sufficient to ensure complete decommissioning between a five-year cost update. The concern is that it provides uncertainty in determining the long-term costs for a project. Apex suggested tying financial assurances to adjustments in the net removal cost for a project updated every five years.

The Commission proposed the solar decommissioning rules with an omission of tangible net worth, debt to equity ratio, and short-term liquidity ratio as a requirement to accept guarantees simultaneously with their removal from the wind decommissioning rules. The Commission has experience with evaluating financial metrics with coal reclamation. Based upon this experience, the Commission recognizes the burdens of due diligence required for continual financial evaluation. It is a cumbersome process subject to dispute, and the Commission is seeing a movement away from guarantees as a financial assurance nationwide for coal reclamation.

³ See PU-17-23

The Commission has viewed the use of nationally recognized statistical rating agencies as a simple and nationally recognized manner of monitoring risk and financial stability. Separately, utilities are rate regulated by the Commission and therefore subject to rigorous review and monitoring. The result of omission of the financial metric standard favoring large developers and public utilities coincides with the stability provided by larger developers and public utilities. However, the Commission recognizes that this may have a disproportionate effect on small to intermediate independent developers. To allow for flexibility in business model and size, the Commission will allow an owner to submit financial metrics for Commission consideration. However, in practice, the Commission will be reticent to accept a guarantee based upon the financial metric as a sole financial assurance for wind or solar facilities and may require additional filing requirements for continued monitoring.

The Commission also declines to revise the proposed rules to limit the Commission's ability to require additional financial assurances between the five year cost updates. The policy goal is to ensure that sufficient funds are available to decommission and restore the site. If there is a finding that a financial assurance is inadequate, the statutory purpose requires additional financial assurances. The stated concerns of uncertainty in long-term cost projections are most likely attributed to unforeseen changes in decommissioning costs or an inadequate cost estimate provided by the owner. Both of these concerns would likely be the very purpose for re-evaluation of a financial assurance. The process requires a basis for the Commission's finding and the owner may refute the basis.

Having considered the comments, the Commission proposes to revise this section to provide the Commission the discretion to consider the financial metrics standard for acceptance of a guarantee.

Montana-Dakota commented that the proposed rule has an incorrect cite. The Commission will revise the proposed rules to correct this error. N.D. Admin. Code 69-09-10-08(1) is revised to correct the cite from 69-09-09-08(2) to 69-09-10-08(2).

Case No. GS-19-217 - Section 69-09-03-02 – Pipeline Safety

Written and oral comments by Jerry Lein of Commission Staff were provided at the hearing. The Commission received no further comments regarding this section.

Commission Staff provided comments that under North Dakota Administrative Code chapter 69-09-03, the Commission adopts by reference the most recent amendments to pipeline safety regulations adopted by PHMSA.

This proposed amendment updates and adopts by reference the PHMSA safety regulations in effect on July 31, 2019, for intrastate gas pipelines, intrastate liquefied natural gas facilities and intrastate hazardous liquids pipelines.

The Commission received no further comments regarding this section and proposes to adopt these amendments without revision.

Case No. PU-19-290 – Section 69-06-08-01 - Energy Conversion Facility Siting Criteria

Written and oral comments by Jerry Lein of Commission Staff were provided at the hearing. Written and oral comments were provided by Apex, the Department of Defense Regional Environmental Coordinator (DOD), and Colonel Todd Sauls, Director of Operations for the 20th Air Force (Air Force). Written comments were received by the Office of the Assistant Secretary of Defense – Military Aviation and Installation Assurance Siting Clearinghouse (Secretary of Defense); Ruso Wind Partners, LLC (Ruso); NextEra Energy Resources, LLC (NextEra); Geronimo Energy, LLC (Geronimo); and Lyle Best.

Sound Level – N.D. Admin. Code § 69-06-08-01(4)

Commission Staff testified that the proposed changes lowers the acceptable sound levels from fifty decibels (dBA) at a distance of one hundred feet from an occupied residence to forty-five dBA for new projects. Mr. Lein explained that the changes are proposed because of concerns expressed by landowners and expert testimony presented to the Commission during siting cases. The purpose of lowering the dBA is to protect a landowner's residence from noise produced from a facility.

Past expert testimony during Commission siting hearings have discussed that a project designed consistent with community welfare and acceptance of the project should have a lower dBA, particularly for non-participants to the project. Staff testified that it believed the forty-five dBA is an appropriate level to protect non-participating landowners from exposure to excessive noise nuisance while not standing in the way of economic development. A number of South Dakota wind projects have been sited with a forty-five dBA limitation. Having this guidance in rules allows a developer to accommodate these changes earlier in the design and modeling process. The rules continue to allow an owner of an occupied residence or community building to waive the sound level avoidance area.

Montana-Dakota opposed lowering the maximum sound level to forty-five dBA. Montana-Dakota also provided an alternative by lowering the threshold to forty-five dBA for non-participating landowners and retaining the fifty dBA maximum threshold for participating landowners.

Apex commented that there is no credible scientific basis for this modification and that the rule change is unnecessary. During the hearing, Apex explained that it did have projects in South Dakota with a forty-five dBA limit for non-participating landowners and a fifty dBA for participating landowners. Apex stated that given what he observed in South Dakota, forty-five dBA is viable from a developmental standpoint and that the sound levels

would not be out of step with the other jurisdictions. However, Apex warned that lowering the dBA below forty-five may hinder development.

NextEra commented that they do not believe there is a need to reduce the sound criteria and that they have received few sound complaints. NextEra submitted that the practice is not supported by evidence or practices in other states and may restrict areas for wind development without additional community or health benefit.

NextEra's comments discussed a number of scientific articles which concluded that there is no health or welfare issue associated with non-participants experiencing sound at or below forty-five dBA at the exterior of their residences. The cited studies also note that increased annoyance during the study may have been driven by visual impacts and attitudes towards the wind project.⁴ NextEra also stated that a study showed that the average annoyance levels from a study range of 30 dBA to 50 dBA were comparable to levels associated with traffic noise.

NextEra also addressed the South Dakota projects discussed during the rulemaking hearing. NextEra stated that there is not a statewide sound limitation for wind projects in South Dakota and that South Dakota addresses the issue case-by-case. NextEra corroborates that the South Dakota Public Utilities Commission has sited projects as low as 40 dBA for non-participating landowners and 45 for participating landowners on an occasion, but has also approved wind projects with a 50 dBA sound limitation. NextEra recommended that the existing sound level not extend below 45 dBA and that it be limited to non-participating landowners.

Geronimo provided a memorandum by a firm that conducts pre- and post-construction noise assessments. RSG commented that the sound level of forty-five dBA is commonly applied to wind power projects throughout the country. However, the proposed rule does not specify a sound metric or averaging time leaving the rule ambiguous. RSG states that South Dakota has used a two-week period and that the World Health Organization also uses an outdoor guideline level of forty-five dBA averaged over the course of an eight-hour night to protect against sleep disturbance. RSG's comments echoed NextEra's comments that annoyance with sound may be attributed to other prerogatives such as opposition to a wind project.

Northwest commented in support of reducing the dBA level of allowable noise registered at an occupied residence or community building. In support, Northwest expressed that the organization has heard complaints of noise associated with wind facilities from members and that noise resulting from wind facilities has the potential to

⁴ NextEra cites a Health Canada study that indicates that there is a statistically significant increase in annoyance when the wind turbine noise exceeds 35 dBA, but also shows that annoyance was significantly lower among participants who received a personal benefit such as payments. <https://www.canada.ca/en/health-canada/services/health-risks-safety/radiation/everyday-things-emit-radiation/wind-turbine-noise/wind-turbine-noise-health-study-summary-results.html>

overpower natural sounds. Northwest commented that the reduction will help preserve features of a rural lifestyle, reduce potential conflict between landowners and developers, and provide the freedom of residents to waive the requirement if they find the higher level acceptable.

Mr. Best recommended parity by deleting the lower noise standard from the proposed rules for wind facilities or apply the equivalent regulations to oil and gas. He also commented that his house measures fifty-nine dBA from the nearest well site and characterized the sounds as a “not-so-distant jet engine.” He expressed that he would be “delighted” to know that the siting agency for oil pads had a regulation on noise.

The Commission appreciates the extensive comments and expertise provided by stakeholders. Many of Mr. Best’s comments were unrelated to the Commission’s jurisdiction; however, the annoyance expressed with the sound of nearby oil pads from his residence is what the Commission aspires to avoid through the creation of avoidance areas and reviewing sound-sensitive land uses in its selection criteria. The Commission will consider Geronimo/RSG’s recommendation to clarify the sound metrics and span for averaging time in future rulemaking, opinions, or guidance documents.

While there is disagreement on the need for the rule change, the comments and Commission’s experience with siting wind facilities demonstrate the ability of the industry to continue to develop at the lower dBA. The sound avoidance area continues to allow a waiver from the owner of an occupied residence or community building.

Having considered the comments, the Commission adopts Proposed N.D. Admin. Code § 69-06-08-01(4) as proposed.

Pooling and Spacing for Wind Development

Northwest provided comments to support the concept of wind development pooling and spacing to ensure that a non-participating landowner receives a just and equitable share from the use of the wind resource. Northwest expressed concern that wind developers shop for landowners that will sign a less favorable lease and will not push for protections. Northwest submits that this is problematic in that it results in assertive landowners being surrounded by facilities while having no benefit of the project. The result is unjust because it renders a non-participating landowner’s wind resource undevelopable while the landowner receives no compensation. Northwest recommended the adoption of rules requiring resources to be spaced and pooled to allow for a just and equitable sharing of proceeds from the development of a wind resource.

Northwest recognized that this was complicated and beyond the scope of the present rulemaking, but wanted to voice support for the concept as wind continues to develop in the state.

The Commission will monitor this issue as the discussion continues with the policymakers of the state.

ICBM Launch Facilities Exclusion Area – N.D. Admin. Code § 69-06-08-01(1)(g).

Commission Staff commented that the proposed addition, N.D. Admin. Code § 69-06-08-01(1)(g) provides that a new subsection be added to define areas within thirty feet of a direct line between an ICBM launch or launch control facilities to avoid microwave interference. During the hearing, Staff commented that the “or” should be changed to an “and.”

Ruso requested revisions to the proposed exclusion area to clarify the specific facilities between line-of-sight that are to be maintained and that the proposed rule’s application is limited to aboveground structures.

Geronimo commented that launch control facilities have not been readily available by the U.S. Air Force and that consultation occurs by providing proposed project facilities to the U.S. Air Force for review. Geronimo suggests that the Commission ask the U.S. Air Force to make maps and other information regarding the location of ICBM launch and launch control facilities available so that the exclusion areas may be identified early in the project siting. If this information is not made available, then Geronimo requests that this not be added as an exclusion area.

DOD commented that wind turbine placement impacts operations of the Minot Air Force Base (MAFB) and missile launch facilities. The DOD recommended wind turbine setbacks be increased from 1,200 feet to a two nautical mile radius from the center of a launch facility or launch control facility and that the developer be required to provide early notification to allow identification of any potential adverse impact to missile field operations. The DOD also recommended that the towers be equipped with collision avoidance lighting compatible with the use of night vision goggles. It was suggested that a company be required to request an informal review through the Military Aviation and Installation Assurance Siting Clearinghouse to identify impacted military missions.

The Secretary of Defense recommended the addition of a facility siting criteria to prevent impacts to ballistic missile silos and launch facilities, lower level military airspace, weather radars, air traffic control radar, and military missions.

The Air Force provided comments during the hearing regarding the impact of wind turbines on ICBM operations and military security response. Col. Sauls stated that wind turbines within two nautical miles of an ICBM facility create a safety hazard for helicopter response teams. He also characterized areas within 1.5 miles as high risk, and areas within half a mile as an extreme risk to personnel and aircraft operations. The level of risk may increase with inclement weather and night conditions. Col. Sauls commented that the wind turbines interfere with helicopter approach avenues, turn radius, and impact

air to ground security operations. The Air Force also expressed concern that it is notified late in the process after easements, leases, and turbine locations are set, which causes difficulty in mitigating impact of the turbine locations. The Air Force recommends the two-mile setback and earlier notification in the process to provide input. Regarding the Commission's proposed rule, the Air Force testified in favor of the proposed addition of an exclusion area within 30 feet on either side of a direct line between ICBM launch or launch control facilities to avoid microwave interference.

Apex testified that the DOD's clearinghouse has been an effective process and no project has gone forward over DOD's concerns. Apex expressed that the industry would like the opportunity to engage in the discussion and recommendations.

A number of comments expanded upon the noticed rulemaking regarding ICBM missile sites, operations, and security. Based upon the concerns noted by the DOD, Secretary of Defense, and Air Force, the Commission may begin a subsequent rulemaking to address the concerns and to provide adequate notice to interested stakeholders.

Upon reviewing the comments related to N.D. Admin. Code § 69-06-08-01(1)(g), the Commission has revised the section to clarify that the rule applies to above-ground facilities. To retain consistency, the Commission also revises N.D. Admin. Code § 69-06-08-02(1)(g) with the same changes.

Case No. PU-19-291 – Chapter 69-09-09 - Wind Facility Decommissioning

Written and oral comments were provided by Jerry Lein of Commission Staff at the hearing. Written comments were provided by Basin Electric Power Cooperative (Basin Electric); Apex; Acciona Wind Energy USA, LLC (Acciona); Montana-Dakota; Northwest; Meadowlark Wind I LLC, and Capital Power Corporation (Capital Power); Sunflower Wind Project, LLC and Novatus Energy (Sunflower); and Lyle Best.

69-09-09-05: Decommissioning Requirements

Montana-Dakota provided comments consistent with its comments on Proposed N.D. Admin. Code ch. 69-09-10. These comments include adding substations and transformers to N.D. Admin. Code § 69-09-09-05(1); allowing an exception to address landowner preference or lease arrangements rather than specifying restoration and reclamation to the approximate original topography; and proposing a qualified contractor with experience in facility decommissioning be added as an option for providing a cost estimate for decommissioning a facility.

A number of these issues mirror, and were addressed under, the Proposed ch. 69-09-10. To echo the previous explanation, the Commission will provide these changes for additional clarity. The Commission agrees that Montana-Dakota's recommendation for

allowing flexibility in the decommissioning process to accommodate exigent circumstances and consider landowner requests is a good one. To accommodate this recommendation, Proposed N.D. Admin. Code § 69-09-09-05 is revised to allow for a waiver of a decommissioning requirement upon receipt of a request signed by a landowner and a finding of good cause that the requirement be waived. This is changed to retain consistency between the two decommissioning programs.

Northwest commented that the requirement of removal of underground cables to a depth of twenty-four inches should be modified for complete removal of the cables. The remaining cables may be an impediment for the installation of future drain tile on the property. Northwest also recommends the addition of language requiring restoration of topsoil to ensure that soil productivity is as close to its original condition as practicable by using the original soil condition as the baseline standard. Northwest states that this is the restoration standard for other energy producers such as coal mining, well pads, and treatment plants. Northwest states that this creates a level playing field for all energy producers and assists landowners as they attempt to protect their land through private agreements.

As stated with the proposed solar decommissioning rules, the Commission agrees that the recommendations set forth by Northwest are good practices; however, the Commission is going to decline modification of the proposed rules to accommodate the practices at this time. The Commission also has generally taken a baseline approach to decommissioning to ensure that the public is protected, but allow the flexibility for the companies and landowners to negotiate more rigorous standards through private agreements. The Commission will take these recommendations under advisement for future rulemakings where they may be addressed simultaneously with wind decommissioning and additional notice is provided to interested parties.

69-09-09-08: Financial Assurance

Basin Electric requested revising N.D. Admin. Code § 69-09-09-08(5)(b)(3) to expand upon which entities may provide a guarantee or parent guarantee by changing “electric public utility” as defined by subsection 2 of N.D.C.C. § 49-03-01.5 to “electric provider” so that electric cooperatives may provide a guarantee as a form of financial assurance for decommissioning.

The Commission previously considered allowing cooperatives to provide guarantees as a financial assurance. Allowing public utilities the opportunity to provide guarantees was tied to the financial scrutiny and regulatory authority that they are subject to. While the Commission acknowledges that independent developers and cooperatives are not similarly situated, Cooperatives are not subject to Commission financial oversight. The requested revision was not one contemplated by the current rulemaking, but the Commission may continue this discussion in future rulemakings.

Apex, Acciona, Capital Power, and Sunflower all expressed concerns over the removal of N.D. Admin. Code § 69-09-09-08(5)(b)(2).

Apex expressed concerns regarding the removal of the financial metrics that mirror its comments for the solar decommissioning rules. Apex commented that the removal of the guarantee qualification of 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” reduces flexibility for various business models. Apex also reiterated its concern for the possibility that the Commission may unilaterally increase the financial assurance required or revise the rule to the project owner opportunity for input.

Acciona commented that it does not have objections to the decommissioning rules applying to non-sited facilities, including the two that it operates in North Dakota. It had already taken steps to comply as if they extended to its facilities. However, they do object to the proposed removal of 69-09-09-08(5)(b)(2), eliminating the financial criteria that allows an entity to qualify to provide a guarantee for decommissioning. Acciona is not a credit-rated agency or a public utility, but it does meet the financial criteria under the current rules. Acciona stated that companies have to pay to have credit agencies provide an analysis and a credit rating and that ongoing maintenance of a credit rating is quite costly. Acciona submits that the balance sheets and financials should be adequate to demonstrate financial stability.

Capital Power recommended that the Commission retain the current 69-09-09-08(5)(b)(2) and commented that the removal of 69-09-09-08(5)(b)(2) functionally requires an independent power producer to have an “A” bond issuance or issuer credit rating to provide a guarantee. Capital Power stated that this is at odds with industry practice of accepting guarantees for “investment grade” ratings and may result in a negative impact on wind development in North Dakota. The cost of financial assurances is significant with a 1.5 to 2 percent of credited amount per year for a letter of credit and that the additional cost does not commensurate with potential risk. If the Commission does remove the current 69-09-09-08(5)(b)(2), Capital Power urges the Commission to accept a guarantee if an entity has an investment grade rating.

Sunflower supported wind farms providing financial assurance to ensure decommissioning of wind farms to protect communities. However, Sunflower opposed the removal of the current 69-09-09-08(5)(b)(2). It commented that the current financial tests to provide for a guarantee are reasonable. To alleviate any concern about a wind farm’s ongoing solvency and risk of bankruptcy, the Commission may consider requiring annual certifications and audited financial statements. Sunflower stated that very few independent power producers have investment grade ratings and that the remaining options would result in costly alternatives. Sunflower commented that the added cost to implement the alternative financial assurances for facilities without salvage value included was not contemplated at the time that their project was financed and constructed and that

it would significantly impact the project's cash flow and financial support to the local community.

Consistent with the discussion and revision to the proposed solar decommissioning rules, the Commission will modify the proposed wind decommissioning rules to retain the financial metrics standard allowing an owner to request the Commission accept a guarantee as a financial assurance.

General Comments

Mr. Best provided comments that although he did not know how the decommissioning and bonding regulations compare between renewable and fossil fuel, he hoped that North Dakota has learned lessons from the abandoned strip mines. He states that he is in favor of decommissioning regulations that are reasonable as long as they are similar to fossil fuel facility regulations to return oil pads, gas plants, coal fired generators, and mines to their former conditions. A number of comments are outside of the Commission's jurisdiction, and relate to regulations set forth by other agencies or local authorities.

In 1975, the Commission was charged with the responsibility of administering the State's program regulating the surface mining of coal. Upon the passage of the Surface Mine Control and Reclamation Act of 1977 (P.L. 95-87, Title IV), the Commission was tasked with the state program for reclaiming abandoned mine lands. Although the Commission is unable to speak to the regulatory requirements of oil pads and local reclamation standards, the reclamation requirements for solar and wind generation are, if anything, less stringent than what is required for coal mining.

Discussion

Having reviewed the proposed 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 that the revised proposed rules and amendments 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

		
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Julie Fedorchak Commissioner	Brian Kroshus Chairman	Randy Christmann Commissioner

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Public Service Commission
Solar Decommissioning
Rulemaking

PU-19-122

CHAPTER 69-09-10
SOLAR FACILITY DECOMMISSIONING

Section

<u>69-09-10-01</u>	<u>Definitions</u>
<u>69-09-10-02</u>	<u>Decommissioning Responsibility</u>
<u>69-09-10-03</u>	<u>Abandonment and Useful Life - Certificate of Operation</u>
<u>69-09-10-04</u>	<u>Decommissioning Period</u>
<u>69-09-10-05</u>	<u>Decommissioning requirements</u>
<u>09-09-10-06</u>	<u>Decommissioning Plan</u>
<u>69-09-10-07</u>	<u>Existing Facilities</u>
<u>69-09-10-08</u>	<u>Financial Assurance</u>
<u>69-09-10-09</u>	<u>Failure to Decommission</u>
<u>69-09-10-10</u>	<u>Solar Energy Conversion Facility - Waiver</u>

69-09-10-01. Definitions.

1. "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. "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 megawatt hour output; and
 - d. Monthly megawatt hour output.
3. "Commercial solar energy conversion facility" means a solar energy conversion facility 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 offsets that reduce decommissioning cost;
 - 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 [date of publication] or, if no certificate of site compatibility was issued, a facility that commenced operation prior to [date of publication].
8. "Facility" means a commercial solar energy conversion facility, including solar modules, racking, anchors, bolts, foundations, bases, transformers, cables, lines, substations, concrete, fences, facility access roads, towers, and all areas disturbed by the construction, operation, maintenance, or decommissioning activities.
9. "Owner" a person who holds a certificate of site compatibility pursuant to North Dakota Century Code chapter 49-22, or if no certificate was issued, a person who owns a facility or part of a facility.

History: Effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-02. Decommissioning responsibility.

The owner is responsible for decommissioning the facility and for all costs

associated with decommissioning.

History: Effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-03. Abandonment and useful life - Certificate of operation.

1. After construction of a facility is complete, the owner shall annually file a certificate of operation with the commission for that facility by April first of each year.
2. A facility is presumed to be at the end of its useful life if its annual capacity factor is less than five percent for two consecutive years.
3. 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.
4. 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.

History: Effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-04. Decommissioning period.

The owner shall begin decommissioning within twelve months after abandonment or the end of its useful life. Decommissioning must be completed within twenty-four months after abandonment or 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 _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-05. Decommissioning requirements.

1. Decommissioning the facility includes:
 - a. Dismantling and removal of all panel racking, photovoltaic modules, supports, anchors, towers, fencing, overhead cables, inverters, transformers, substations and other equipment;

- b. Removal of underground cables to a depth of twenty-four inches [60.96 centimeters];
 - c. Removal of pilings and anchors, foundations, buildings, and ancillary equipment to a depth of four feet [121.92 centimeters].
 - d. 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
 - e. Grading and restoring topsoil of areas disturbed by the facility, and reseeded according to natural resource conservation service recommendations.
2. The Commission may waive a decommissioning requirement upon receipt of a request signed by the applicable landowner and finding good cause that the requirement be waived.

History: Effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-06. Decommissioning plan.

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 the 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 _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-07. Existing facilities.

The owner of an existing facility shall provide financial assurance upon ten years of operation sufficient to complete decommissioning.

History: Effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-08. Financial assurance.

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 and receipt of financial assurance pursuant to 69-09-10-08(2), 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, cash escrow held by a federal insured financial institution, a surety bond, irrevocable letter of credit, 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 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 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 subsection 2 of North Dakota Century Code section 49-03-01.5.
6. The total amount of an outstanding 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 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, canceled, 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 _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-09. Failure to decommission.

If the owner does not complete decommissioning, the commission may take action to complete decommissioning, including action to require forfeiture of 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 facility, including the exercise by the commission, commission staff, and their contractors of the right of ingress and egress for the purpose of decommissioning the facility.

History: Effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-10-10. Solar energy conversion facility - Waiver.

The commission may grant a waiver of any requirement described in sections 69-09-10-03, 69-09-10-06, or 69-09-10-08 for a commercial solar energy conversion facility with a nameplate generating capacity of no more than five megawatts of electricity upon a motion demonstrating good cause for the waiver.

History: Effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Public Service Commission
Pipeline Safety
Rulemaking

Case No. GS-19-217

69-09-03-02. Adoption of regulations. The following parts of title 49, Code of Federal Regulations in effect as of ~~December 31, 2017~~July 31, 2019, are adopted by reference:

1. Part 190 - Pipeline Safety Programs and Rulemaking Procedures.
2. Part 191 - Transportation of Natural Gas and Other Gas by Pipeline, Annual Reports, Incident Reports, and Safety-Related Condition Reports.
3. Part 192 - Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards.
4. Part 193 – Liquefied Natural Gas Facilities: Federal Safety Standards
5. Part 194 – Response Plans for Onshore Oil Pipelines
6. Part 195 - Transportation of Hazardous Liquids by Pipeline.
7. Part 199 - Drug and Alcohol Testing.

Copies of these regulations may be obtained from:

Public Service Commission
600 East Boulevard, Dept. 408
Bismarck, ND 58505-0480

History: Effective June 1, 1984; amended effective July 1, 1986; January 1, 1988; March 1, 1990; February 1, 1992; August 1, 1993; August 1, 1994; February 1, 1996; July 1, 1997; July 1, 1998; September 1, 1999; August 1, 2000; January 1, 2002; November 1,

2003; May 1, 2005; July 1, 2006; April 1, 2008; January 1, 2010; April 1, 2012; April 1, 2015; October 1, 2016, July 1, 2018; _____, 2020.

General Authority: NDCC 28-32-02

Law Implemented: NDCC 49-02-01.2

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 an intercontinental ballistic missile (ICBM) launch facility and a missile alert or launch control facilities to avoid microwave interference. This restriction only applies to above-ground structures, not to surface features, such as roads, or below-ground infrastructure.

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 _____, 2020.

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 an intercontinental ballistic missile (ICBM) launch facility and a missile alert or launch control facilities to avoid microwave interference. This restriction only applies to aboveground structures, not to surface features, such as roads, or belowground infrastructure.

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; _____, 2020.

General Authority: NDCC 49-22-18

Law Implemented: NDCC 49-22-05.1

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Public Service Commission
Wind Decommissioning
Rulemaking

PU-19-291

CHAPTER 69-09-09
WIND FACILITY DECOMMISSIONING

Section	
69-09-09-01	Definitions
69-09-09-02	Decommissioning Responsibility
69-09-09-03	Abandonment and Useful Life - Certificate of Operation
69-09-09-04	Decommissioning Period
69-09-09-05	Decommissioning requirements
09-09-09-06	Decommissioning Plan
69-09-09-07	Existing Facilities
69-09-09-08	Financial Assurance
69-09-09-09	Failure to Decommission
69-09-09-10	Wind Energy Conversion Facility - Waiver

69-09-09-01. Definitions.

1. "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. "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 megawatt hour output; and
 - d. Monthly megawatt hour output.
3. "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 offsets that reduce decommissioning cost;
 - 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~~ was issued prior to July 1, 2017-or, if no certificate of site compatibility was issued, a facility that commenced operation prior to [date or publication].
8. "Facility" means a commercial wind energy conversion facility, including wind turbines, turbine towers, tower bases, blades, pad transformers, collector cables, lines, substations, concrete, fences, 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, or if no certificate was issued, a person who owns a facility or part of a facility.

History: Effective October 1, 2008; amended effective July 1, 2017, amended effective
, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-09-02. Decommissioning responsibility.

The owner is responsible for decommissioning the facility and for all costs associated with decommissioning.

History: Effective October 1, 2008; amended effective July 1, 2017.

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

Law Implemented: NDCC 49-02-27

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

1. After construction of a facility is complete, the owner shall annually file a certificate of operation with the commission for that facility by April first 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 nongenerating 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; amended effective July 1, 2017.

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

Law Implemented: NDCC 49-02-27

69-09-09-04. Decommissioning period.

The owner shall begin decommissioning within twelve months after abandonment or the end of its useful life. Decommissioning must be completed within twenty-four months after abandonment or 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; amended effective July 1, 2017.

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

Law Implemented: NDCC 49-02-27

69-09-09-05. Decommissioning requirements.

1. Decommissioning the facility includes:
 - a. Dismantling and removal of all towers, turbine generators, transformers, fencing, and overhead cables, inverters, transformers, substations and other equipment;
 - b. Removal of underground cables to a depth of twenty-four inches [60.96 centimeters];
 - c. Removal of foundations, buildings, and ancillary equipment to a depth of:
 - (1) Three feet [91.44 centimeters] for facilities constructed before July 1, 2017; and
 - (2) Four feet [121.92 centimeters] for facilities constructed on or after July 1, 2017;
 - d. 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
 - e. Grading and restoring topsoil of areas disturbed by the facility, and reseeding according to natural resource conservation service recommendations.
2. The Commission may waive a decommissioning requirement upon receipt of a request signed by the applicable landowner and finding good cause that the requirement be waived.

History: Effective October 1, 2008; amended effective July 1, 2017, amended effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-09-06. Decommissioning plan.

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 the 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; July 1, 2017.

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

Law Implemented: NDCC 49-02-27

69-09-09-07. Existing facility facilities.

The owner of an existing facility shall provide financial assurance ~~after the tenth upon ten year years~~ of operation sufficient to complete decommissioning.

History: Effective October 1, 2008; amended effective July 1, 2017; amended effective _____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-09-08. Financial assurance.

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 and receipt of financial assurance pursuant to 69-09-09-08(2), 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, cash escrow held by a federal insured financial institution a surety bond, irrevocable letter of credit, self-guarantee 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 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 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; or
 - (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 subsection 2 of North Dakota Century Code section 49-03-01.5.
6. The total amount of an outstanding self-guarantee 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 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, canceled, 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; amended effective July 1, 2017; amended effective
_____, 2020.

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

Law Implemented: NDCC 49-02-27

69-09-09-09. Failure to decommission.

If the owner does not complete decommissioning, the commission may take action to complete decommissioning, including action to require forfeiture of 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 facility, including the exercise by the commission, commission staff, and their contractors of the right of ingress and egress for the purpose of decommissioning the facility.

History: Effective October 1, 2008; amended effective July 1, 2017.

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

Law Implemented: NDCC 49-02-27

69-09-09-10. Wind energy conversion facility - Waiver.

The commission may grant a waiver of any requirement described in sections 69-09-09-03, 69-09-09-06, or 69-09-09-08 for a commercial wind energy conversion facility with a nameplate generating capacity of no more than five megawatts of electricity upon a motion demonstrating good cause for the waiver.

History: Effective July 1, 2018.

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

Law Implemented: NDCC 49-02-27