

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

**Basin Electric Power Cooperative
Lonesome Creek Station Phase III Project
Siting Application**

Case No. PU-14-852

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

April 29, 2015

Appearances

Commissioners Julie Fedorchak, Brian P. Kalk, and Randy Christmann

Anine Lambert, Attorney, and Casey J. Jacobson, Senior Staff Counsel, Basin Electric Power Cooperative, 1717 East Interstate Avenue, Bismarck, North Dakota 58503, on behalf of Basin Electric Power Cooperative.

Brian Schmidt, Assistant Attorney General, as Counsel for the North Dakota Public Service Commission, State Capitol, 600 East Boulevard Avenue, Bismarck, North Dakota 58505, on behalf of the Public Service Commission.

Wade C. Mann, Administrative Law Judge, Office of Administrative Hearings, 2911 North 14th Street, Suite 303, Bismarck, North Dakota 58503, as Procedural Hearing Officer.

Preliminary Statement

On December 31, 2014, Basin Electric Power Cooperative (Basin Electric) filed an application for a Certificate of Site Compatibility (Application) for Lonesome Creek Station Phase III Project(Phase III) to be located at the existing Lonesome Creek Station (LCS) site approximately 14 miles west of Watford City, North Dakota.

On January 21, 2015, the Commission deemed the application complete and issued a Notice of Filing and Notice of Hearing, scheduling a public hearing on the Application to begin March 26, 2015 at 9:00 a.m. CST at Teddy's Residential Suites, 113 9th Ave. SE, Watford City, North Dakota, 58854. The Notice identified the following issues:

1. Will the location, construction and operation of the proposed facilities produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota?
2. Are the proposed facilities compatible with the environmental preservation and the efficient use of resources?
3. Will the proposed facility locations minimize adverse human and environmental impact while ensuring continuing system reliability and integrity and ensuring that energy needs are met and fulfilled in an orderly and timely fashion?

On March 26, 2015, at 9:00 a.m. CST, a public hearing was held as scheduled.

Having allowed all interested persons an opportunity to be heard and having heard, reviewed, and considered all testimony and evidence presented, the Commission makes the following:

Findings of Fact

1. Basin Electric is a regional wholesale electric generation and transmission cooperative, organized under the laws of the state of North Dakota, and headquartered in Bismarck, North Dakota. Basin Electric provides power to 138 member distribution systems serving more than 2.8 million consumers in nine states, including North Dakota.

Size, Type, and Preferred Location of Facility

2. Phase III is an addition of 135MW electric generation capacity to the LCS consisting of three 45MW natural gas combustion turbines. The LCS is located approximately 14 miles west of Watford City, North Dakota. Phase I of the LCS consists of a 45MW natural gas combustion turbine that began commercial operation in December of 2013. Phase II of the LCS consists of two 45MW natural gas combustion turbines that began commercial operation in January of 2015. The Commission's March 26, 2014 order in Case No. PU-12-790 granted Certificate of Site Compatibility Number 37 designating a 48.4 acre site for Phase II. The previously designated 48.4 acre site for Phase II is within the boundaries of the 66.7 acre site requested for designation in this proceeding.

3. Basin Electric proposes to begin construction on two of the proposed additional units in May of 2015 with commercial operation to commence in June of 2016. Construction of the third proposed additional unit is expected to begin in May of 2016 with commercial operation to commence in June of 2017.
4. The total cost of Phase III is estimated to be \$149 million.
5. Phase III will be designed and constructed to meet all relevant state and national codes and standards including the National Electric Safety Code.
6. Phase III will be owned, operated and maintained by Basin Electric.

Need for Facility

7. Basin Electric testified that the demand for electric power by its member cooperatives is anticipated to increase by 1,900 MW between 2014 and 2035.

Study of Preferred Location

8. Basin Electric requests that the commission designate a 66.7 acre site in North Dakota, McKenzie County, Township 150 North, Range 101 West, Section 23, SW ¼ for locating energy conversion facilities capable of generating electricity. Basin Electric surveyed a 160 acre parcel on which the entire LCS is located for Cultural and Natural Resources. No wetlands, waterbodies or cultural resources were identified on the 160 acre parcel.
9. Basin Electric applied for a Conditional Use Permit from McKenzie County in March, 2015 and expects the permit to be approved in April, 2015.
10. Basin Electric conducted modeling studies that indicate noise expected from the LCS, including Phase III, will not exceed the EPA noise guideline. The EPA guideline recommends not exceeding a day-night sound level of 55 A-weighted decibels at surrounding noise-sensitive receivers. The nearest residence is located approximately ¾ mile from the LCS.
11. The following agencies were contacted by Basin Electric: the Department of the ARMY, the North Dakota Department of Health, the North Dakota Game and Fish Department, the North Dakota State Historical Society, the North Dakota State Water

Commission, the US Army Corps of Engineers, the US Department of Agriculture, the US Fish and Wildlife Services.

12. In its August 26, 2014 response, the US Army Corps of Engineers determined that the site contains no jurisdictional waters of the US.

13. In its September 2, 2014 response, the North Dakota Department of Health indicated that they believe the environmental impacts from the proposed construction will be minor and can be controlled by proper construction methods.

14. In its September 2, 2014 response, the US Department of Agriculture has no additional comment on the project.

15. In its September 8, 2014 response, the North Dakota State Water Commission indicated that the project will not affect flood plains, floodway areas or sole-source aquifers.

16. In its September 16, 2014 response, the ND Game and Fish Department indicated that they do not believe the project will have a significant adverse effect on wildlife or wildlife habitat.

17. In its September 19, 2014 phone conversation with Basin Electric, the US Fish and Wildlife Service indicated that they were not able to identify any concerns with the project.

18. In its September 23, 2014 response, the State Historic Preservation Officer concurred with a "No Historic Properties Affected" determination provided that the project remains as specified and takes place in the mapped location provided in the correspondence dated September 19, 2014

Siting Criteria

19. The Commission has established criteria pursuant to North Dakota Century Code section 49-22-05.1, to be used in identifying exclusion and avoidance areas and to guide the site, corridor, and route suitability evaluation and designation process. The Exclusion Areas, Avoidance Areas, Selection Criteria, and Policy Criteria are set forth in North Dakota Administrative Code section 69-06-08-01.

20. Basin Electric evaluated the 66.7 acre area on which the entire LCS, including Phase III, is located for Exclusion Areas, Avoidance Areas, Selection Criteria and Policy Criteria.
21. There are no Exclusion or Avoidance Areas at the 66.7 acre site.
22. In accordance with the Commission's Selection Criteria listed in North Dakota Administrative Code section 69-06-08-01(3), Basin Electric submitted information that any significant adverse effects from the location, construction and maintenance of the facility as they relate to the Selection Criteria will be at an acceptable minimum or will be managed and maintained at an acceptable minimum.
23. Basin Electric submitted information demonstrating its commitment to maximize the benefits of the proposed energy conversion facility to meet the Policy Criteria set forth in North Dakota Administrative Code section 69-06-08-02(4).
24. Basin Electric has indicated that it will use best available control technologies to minimize air emissions and will comply with United States Environmental Protection Agency and North Dakota Department of Health air quality standards. Basin Electric has applied for a Prevention of Significant Deterioration permit from the North Dakota Department of Health and will submit the permit upon approval.
25. Based on the information provided by Basin Electric in its application and through testimony, the commission finds Phase III will have no significant impact on demographics, cultural resources, recreational resources, land-based economics, geologic and groundwater resources, surface water and floodplain resources, wetlands, or rare and unique resources.

Measures to Minimize Impact

26. Small quantities of hazardous materials will be used and generated by Phase III. Basin Electric will minimize the use of hazardous materials and employ proper management and disposal procedures in accordance with Occupational Safety and Health Administration standards and protocols.
27. In its application Basin Electric provided measures for erosion prevention and sediment control during and after construction. Once construction is completed, all unused land will be returned to its former condition and re-vegetated.

28. Basin Electric made other representations and agreements as contained in the Certification Relating to Order Provisions – Energy Conversion Facility Siting with accompanying Tree and Shrub Mitigation Specifications, executed by Basin Electric on March 16, 2015.

From the foregoing Findings of Fact, the Commission now makes its:

Conclusions of Law

1. The Commission has jurisdiction over this proceeding under North Dakota Century Code Chapter 49-22.
2. Phase III is an energy conversion facility capable of generating electricity as identified in North Dakota Century Code section 49-22-03(5)(b).
3. Phase III is of such design, location and purpose that it will produce minimal adverse effects as defined in North Dakota Century Code section 49-22-03(5).
4. The Application submitted by Basin Electric meets the site evaluation criteria required by North Dakota Century Code Chapter 49-22.
5. The location, construction and operation of Phase III will produce only minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.
6. Phase III is compatible with the environmental preservation and the efficient use of resources.
7. Phase III will minimize adverse human and environmental impact, while ensuring continuing system reliability and integrity, and ensuring that energy needs are met and fulfilled in an orderly and timely fashion.

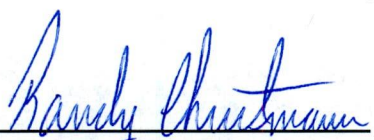
From the foregoing Findings of Fact and Conclusions of Law, the Commission now makes its:

Order

The Commission orders:

1. Certificate of Site Compatibility No. 43 is issued to Basin Electric Power Cooperative designating a 66.7 acre site for the construction, operation and maintenance of energy conversion facilities capable of generating electricity.
2. For purposes of the Certificate, the Site consists of approximately 66.7 acres in North Dakota, McKenzie County, Township 150 North, Range 101 West, Section 23, SW 1/4, as described in the Application. The 48.4 acre site designated by the Commissions March 26, 2014 order in Case No. PU-12-790, Certificate of Site Compatibility Number 37, is within the boundaries of the 66.7 acre site requested for designation in this proceeding.
3. The March 16, 2015 Certification Relating to Order Provisions-Energy Conversion Facility Siting, with accompanying Tree and Shrub Mitigation Specifications is incorporated by reference and attached to this Order with the following modifications:
 - a. The second to last word in Certification Provision 5 is hereby changed from "weekly" to "monthly".
 - b. Certification Provision 33 is hereby removed.
 - c. The phrase "and clearance to proceed has been given by the Commission" is hereby removed from Certification Provision 34.
4. The Company is required to comply with the applicable laws, rules, and/or regulations in the event it desires to construct another or a different energy conversion facility than was specified in the application within the site granted in this proceeding.
5. To the extent there are any conflicts or inconsistencies between Basin Electric's application and the March 16, 2015 Certification, the Certification provisions control.

PUBLIC SERVICE COMMISSION



Randy Christmann
Commissioner



Julie Fedorchak
Chairman



Brian P. Kalk
Commissioner

PUBLIC SERVICE COMMISSION

STATE OF NORTH DAKOTA

Certificate of Site Compatibility Number 43

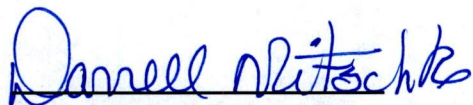
This is to certify that the Commission has designated a 66.7 acre site for Basin Electric Power Cooperative's energy conversion facility capable of generating electricity in McKenzie County, North Dakota.

This certificate is issued in accordance with the Findings of Fact, Conclusion of Law and Order of the Commission in Case No. PU-14-852 dated April 29, 2015 and is subject to the conditions and limitations noted in the Order.

Bismarck, North Dakota, April 29, 2015.

ATTEST:

PUBLIC SERVICE COMMISSION



Executive Secretary



Commissioner



STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

**Basin Electric Power Cooperative
Lonesome Creek Station, Phase III – McKenzie County
Siting Application**

Case No. PU-14-852

**CERTIFICATION RELATING TO ORDER PROVISIONS - ENERGY CONVERSION
FACILITY SITING**

I am Josh Rossow, a representative of Basin Electric Power Cooperative ("Company") with authority to bind Company to requirements to be set forth by the Commission in its Order and I certify the following:

1. Company understands and agrees that the Certificate of Site Compatibility will be issued by the Commission subject to the conditions and criteria set forth in Chapter 49-22 of the North Dakota Century Code and Chapter 69-06-08 of the North Dakota Administrative Code, and that Company shall be responsible for compliance with this order and conditions and criteria set forth in the applicable laws and rules.
2. Company agrees to hold a preconstruction conference prior to commencement of any construction, which must include a Company representative, its construction supervisor, and a representative of Commission Staff, to ensure that Company fully understands the conditions set forth in the Commission's order.
3. Company agrees to comply with the rules and regulations of all other agencies having jurisdiction over any phase of the proposed energy conversion facility including all city, township, and county zoning regulations.
4. Company understands and agrees that it shall obtain all other necessary licenses and permits, and shall provide copies of all licenses and permits to the Commission prior to construction activity associated with the energy conversion facility that requires said license or permit.
5. Company agrees to inform the Commission and the Commission's third-party construction inspector of its intent to start construction on the energy conversion facility prior to the commencement of construction. Once construction has started, Company shall keep the Commission and the Commission's third-party construction inspector updated of construction activities on a weekly basis.
6. Company understands and agrees that the Certificate of Site Compatibility is subject to suspension or revocation and may, in an appropriate and proper case, be suspended or revoked for failure to comply with the Commission's order, the conditions and criteria of the certificate or subsequent modification, or failure to

comply with the applicable statutes, rules, regulations, standards, and permits of other state or federal agencies.

7. Company agrees to maintain records that will demonstrate that it has complied with the requirements of the Commission's order and the Certificate of Site Compatibility, and that it will preserve these records for Commission inspection at any reasonable time upon reasonable notice.
8. Company agrees to construct and operate the energy conversion facility in accordance with all applicable safety requirements.
9. Company agrees to construct and operate the energy conversion facility in the manner described in Company's application, in any late filed exhibits, and supplemental materials, (Application). To the extent there are any conflicts or inconsistencies between Company's Application and the provisions in this Certification Relating to Order Provisions, the Certification provisions control.
10. Company agrees to report promptly to the Commission the presence in or near the approved site of any critical habitat of threatened species, endangered species, bald eagles, or golden eagles that Company becomes aware of and which were not previously reported to the Commission.
11. Company understands and agrees that all cultural resource mitigation plans must be submitted to the North Dakota State Historic Preservation Office and approved prior to the start of any fieldwork and construction activity in the affected area.
12. Company understands and agrees that if any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further disturbances until a professional examination can be made by the State Historical Society, a report of such examination is filed with the Commission, and clearance to proceed is given by the Commission.
13. Company understands and agrees that all buried facility crossings of graded roads shall be bored unless the responsible governing agency specifically permits Company to open cut the road.
14. Company understands and agrees that all pre-existing township and county roads and lanes used during construction must be repaired or restored to a condition that is equal to or better than the condition prior to the construction of the energy conversion facility and that will accommodate their previous use, and that areas used as temporary roads or working areas during construction must be restored to their original condition.


15. Company understands and agrees that construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land, unless adequate protection measures approved by the Commission are taken.
16. During construction, at least 12 inches of topsoil, where available (or topsoil to the depth of cultivation, whichever is greater), over and along areas where facilities will be placed must be stripped and segregated from subsoil. Any area on which excavated subsoil will be placed must first be stripped of topsoil. After backfilling with subsoil is completed, any excess subsoil must be placed over the excavation area, blending the grade into existing topography. Topsoil must not be placed within the footprint of the facilities, and must be placed over areas containing topsoil.
17. Company understands and agrees that reclamation, fertilization, and reseeded is to be done according to the Natural Resources Conservation Service recommendations, unless otherwise specified by the landowner and approved by the Commission.
18. Company understands and agrees that its obligation for reclamation and maintenance of the approved site will continue throughout the life of the energy conversion facility.
19. Company agrees to comply with the Tree and Shrub Mitigation Specifications, attached.
20. Company understands and agrees that it shall repair or replace all fences and gates removed or damaged during all phases of construction and operation of the proposed energy conversion facility.
21. Company understands and agrees that it shall repair or replace all drainage tile broken or damaged as a result of construction and operation of the proposed energy conversion facility.
22. Company understands and agrees that it shall work with landowners and residents to mitigate any increase in television and residential radio interference that results from the construction of the energy conversion facility.
23. Company understands and agrees that staging areas or equipment shall not be located on land owned by a person other than Company unless otherwise negotiated with landowners.
24. Company understands and agrees that it shall remove all waste that is a product of construction and operation, restoration, and maintenance of the site, and properly dispose of it on a regular basis.

25. Company agrees that it shall, as soon as practicable upon the completion of the construction of the energy conversion facility, restore the area affected by the activities to as near as is practicable to the condition as it existed prior to the beginning of construction.
26. Company understands and agrees that it shall provide any necessary safety measures for traffic control or to restrict public access to the energy conversion facility.
27. Company understands and agrees that it shall advise the Commission of any extraordinary events which take place at the site of the energy conversion facility, including injuries to any person, the death of any threatened or endangered species, within five business days of such event.
28. Company understands and agrees that it shall implement a procedure for how complaints concerning the proposed energy conversion facility will be handled by Company
29. Upon request, Company agrees to provide the Commission with engineering design drawings showing surveyed structure prior to construction.
30. Company understands and agrees that it shall inform the Commission in writing of any plans to modify the energy conversion facility, or of any plans to modify the site plan for the energy conversion facility. Company understands and agrees to obtain written approval from the Commission prior to any modifications to the site plan or the energy conversion facility, associated facilities, and roadway locations. Approval may be granted after notice and opportunity for hearing.
31. Company agrees to provide the Commission with both an electronic and a paper copy of the site approved by the Commission and the facility design specifications for the construction of the energy conversion facility showing the location of the energy conversion facility as built, and will provide this information within 3 months of the completion of the construction. Company also agrees to provide an electronic version of the site approved by the Commission and the facility design specifications for the construction of the energy conversion facility showing the location of the energy conversion facility as built that can be imported into ESRI GIS mapping software within 3 months of the completion of the construction. This electronic map data must be referenced to the North Dakota coordinate system of 1983, North and/or South zones US Survey feet (NAD 83) UTM Zone 13N or 14N feet (NAD 83), or geographic coordinate system (WGS 84) feet. The vertical data must be in the appropriate vertical datum for the coordinate system used. All submissions must specify the datum in which the data was developed.

32. Company understands and agrees that the authorizations granted by the Certificate of Site Compatibility for the energy conversion facility are subject to modification by order of the Commission if deemed necessary to protect further the public or the environment.
33. Company understands and agrees that in the event Company desires to construct, within any site granted by a Certificate of Site Compatibility in this proceeding, an energy conversion facility that was not requested in Company's application in this proceeding, Company shall apply for a Certificate of Site Compatibility for the facility.
34. Company shall notify the Commission, as soon as reasonably possible, if any damage, as defined by North Dakota Century Code Chapter 49-23, occurs to underground facilities during construction conducted under the certificate or permit issued in this proceeding. In the event of any damage to underground facilities, Company shall suspend construction in the vicinity of the damage until compliance with One-Call Excavation Notice System requirements under North Dakota Century Code Chapter 49-23 has been determined and clearance to proceed has been given by the Commission.
35. The certificate of site compatibility is subject to suspension or revocation and may, after hearing, be suspended or revoked for failure to comply with the Commission's order, requirements of the One-Call Excavation Notice System under North Dakota Century Code Chapter 49-23, the conditions and criteria of the certificate or permit or subsequent modification, or failure to comply with applicable statutes, or rules, regulations, standards, and permits of other state or federal agencies.

Dated this 16th day of March, 2015.

Company Name

By 

Its Project Manager II

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

**Basin Electric Power Cooperative
Lonesome Creek Station, Phase III – McKenzie County
Siting Application**

Case No. PU-14-852

Tree and Shrub Mitigation Specifications

Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (e.g., *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, must be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height (dbh) or greater must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil must be preserved and replaced after construction. Shrubs must be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared must be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by a sampling method that will properly represent the woody vegetation population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs.

The data from the sample plots must be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

Clearing for Construction

7. Trees and shrubs must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced must be noted on the inventory.

Replacement

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with the Commission for approval.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service. Invasive or noxious species must be replaced by similar non-invasive or non-noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.
13. Landowners must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.

14. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
15. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).