

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

**Basin Electric Power Cooperative
Pioneer Generation Station – Williams County
Siting Application**

Case No. PU-14-829

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

_____, 2015

Appearances

Commissioners Julie Fedorchak, Randy Christmann and Brian P. Kalk

Casey J. Jacobson, Senior Staff Counsel and Anine Lambert, Attorney, Basin Electric Power Cooperative, 1717 East Interstate Avenue, Bismarck, North Dakota 58503, on behalf of the applicant, 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 Mann, Administrative Law Judge, Office of Administrative Hearings, 2911 North 14th Street, Suite 303, Bismarck, North Dakota 58501-1882, as Procedural Hearing Officer.

Preliminary Statement

On November 26, 2014, Basin Electric Power Cooperative (“Basin Electric”) submitted its Application for a Certificate of Site Compatibility (“Application”) to authorize construction and operation of the Pioneer Generating Station Phase III (“Project”). The Project consists of twelve Reciprocal Internal Combustion Engines and associated auxiliary equipment to be located at the existing site of the Pioneer Generation Station, approximately fifteen miles northwest of Williston, ND.

On January 7, 2015, the Public Service Commission deemed the application complete and issued a Notice of Filing and Notice of Hearing, scheduling a public hearing on Basin Electric’s Application to begin March 2, 2015 at 9:30 a.m. CST at the Ernie French Center of the North Dakota State University Williston Research Center, Williston, ND 58801. The Notice identified the following issues to be considered:

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 2, 2015, at 9:30 a.m. CST, a public hearing was held as scheduled. Basin Electric presented three witnesses and three members of the public testified.

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.
2. The Project is an addition to Basin Electric's existing Pioneer Generation Station site ("PGS") approximately fifteen miles northwest of Williston in the SE1/4 of Section 20, Township 155 North, Range 103 West, Hebron Township, Williams County, North Dakota. PGS Unit 1 began commercial operation in September, 2013, Unit 2 began commercial operation in February, 2014 and Unit 3 began commercial operation in March, 2014. The PGS Phase III consists of adding twelve nominal 9.22 MW reciprocating internal combustion engines (gas engines) with a total nominal gross electrical output of 111 MW.

3. The gas engines are turbo-charged, four-stroke, lean-burn (4SLB) engines that are designed to meet variable electrical demands from 3 MW to 111 MW, depending on the number of engines in service. The gas engines would combust natural gas and, in case of natural gas curtailment, the engines could combust liquefied propane gas (LPG) as back-up fuel. The Project incorporates the design to accommodate LPG tanks and supporting interconnections, although the infrastructure to support usage of LPG will not be initially installed. In Fall 2015, Basin Electric will be migrating in to the Southwest Power Pool, a regional transmission organization. If and when SPP operating criteria require that PGS have short-term secondary fuel supply, the LPG system will be installed. The LPG option was incorporated in to the PSD air permit application and the PSD air permit would allow the use of LPG. The auxiliary equipment for the twelve gas engines would include a dew point heater, an emergency fire pump, an emergency generator, and LPG vaporizer, fuel storage tanks and circuit breakers.
4. The Project will be designed and constructed to meet all relevant state and national codes and standards including the National Electric Safety Code.
5. The Project will be owned, operated and maintained by Basin Electric.
6. The total cost of the Project is estimated to be \$161.2 million.
7. Basin Electric concluded the Project is needed to serve the company's member cooperatives due to the oil and gas development in the Williston Basin. After initializing Phases I and II, Basin Electric concluded from load studies that the Project is needed because its membership's demand for electric power is anticipated to increase by about 1,900 MW from 2012 through 2035.
8. Basin Electric contemplates beginning construction of Phase III on May 15, 2015 with commercial operation expected on June 1, 2016.
9. Basin Electric owns the entire 120-acre PGS parcel, located within the SE1/4 of Section 20, Township 155 North, Range 103 West in Williams County, North Dakota. The Project Site consists of approximately 12.5 acres in addition to the existing 7.1 acres occupied by PGS Phases I and II. The 12.5-acre site would include approximately 8.2 acres for the new gas engines, 3.4 acres for the new switchyard and approximately 0.9 acre for the new stormwater retention pond.

10. North Dakota Century Code § 49-22-16 provides that no energy conversion facility site shall be designated if it violates any county or city land use, zoning, building rules, regulations, or ordinances. Basin Electric has obtained all required construction and zoning permits from Hebron Township. The Conditional Use Permit from Williams County and the Permit to Construct from the North Dakota Department of Health have not yet been acquired. Both are expected by May 2015. The 120 acre parcel containing the Project site, although currently used for agriculture, is zoned Industrial. The ONEOK Stateline natural gas processing plant is located directly across the road to the east of the site.

11. There are no local noise ordinances applicable to the Project. Basin Electric conducted modeling studies that indicate noise expected from the Project at sensitive receptors will not exceed EPA recommended guidelines. The nearest residence is located between 1.5 and 1.75 miles from the Project Site.

12. The State Historic Preservation Officer has concurred with a determination that no historic properties will be affected by the Project.

13. The Commission has established criteria pursuant to North Dakota Century Code § 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 §69-06-08-01. Basin Electric evaluated the Project Site and surrounding area for Exclusion Areas, Avoidance Areas, Selection Criteria and Policy Criteria.

14. An energy conversion facility must not be sited within an Exclusion Area. There are no Exclusion Areas within the Project Site.

15. An energy conversion facility must not be sited within an Avoidance Area unless the applicant shows that under the circumstances there is no reasonable alternative. There are no Avoidance Areas within the Project Site.

16. In accordance with the Commission's Selection Criteria, an energy conversion facility site may be approved only when it is demonstrated that any significant adverse effects resulting from the location, construction and operation of the facility in that area will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum.

17. Basin Electric submitted information in its Application and through testimony that any significant adverse effects from the location, construction and maintenance of the facility as they relate to the Selection Criteria listed at N.D. Admin. Code §69-06-08-01(3) will be at an acceptable minimum or will be managed and maintained at an acceptable minimum.

18. In accordance with the Commission's Policy Criteria, preference may be given to an applicant demonstrating certain benefits from the adoption of certain policies and practices.

19. Basin Electric submitted information in its Application and through testimony, demonstrating its commitment to maximize the benefits of the proposed energy conversion facility to meet the Policy Criteria set forth in N.D. Admin. Code §69-06-08-02(4).

20. The Project will not have a 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.

21. 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. The existing PGS is classified as a minor Prevention of Significant Deterioration facility that is not subject to PSD construction permit review. If the facility is located within a National Ambient Air Quality Standard defined attainment area and the Source is not included within the listed PSD source categories, stationary sources may emit up to 250 tons per year of any criteria pollutant before the source is subject to PSD review and permitting. The emissions from the Project would not exceed 250 tons per year for any criteria pollutant. Therefore the Project is a minor stationary source that is not subject to PSD review.

22. Small quantities of hazardous materials will be used and generated by the proposed energy conversion facility. Basin Electric will minimize the use of such materials and employ proper management and disposal procedures.

23. Basin Electric will engage in 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.

24. 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 February 23, 2015, which is incorporated in these Findings of Fact.

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. The energy conversion facility proposed by Basin Electric is an energy conversion facility as defined in North Dakota Century Code §49-22-03(5).

3. The proposed Project is of such design, location and purpose that it will produce minimal adverse effects as defined in North Dakota Century Code §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 the proposed energy conversion facility will produce only minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota.

6. The proposed energy conversion facility is compatible with the environmental preservation and the efficient use of resources.

7. The proposed energy conversion facility 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.

8. The Commission has jurisdiction to ensure compliance with the National Electrical Safety Code Standards in the construction and operation of the proposed energy conversion facility.

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. ____ is issued to Basin Electric Power Cooperative authorizing the construction, operation and maintenance of twelve Reciprocal Internal Combustion Engines and associated facilities as identified in the application.
2. For purposes of the Certificate, the Site consists of approximately 120 acres in the SE1/4 of Section 20, Township 155 North, Range 103 West, Williams County, North Dakota, as further described in the Application.
3. Basin Electric shall request a jurisdictional determination from the Commission under N.D. Admin. Code chapter 69-06-02.1 prior to the construction of any energy conversion facilities within the Commission designated Site.
4. This Certificate of Site Compatibility is subject to Basin Electric obtaining the Conditional Use Permit from Williams County and the Permit to Construct from the North Dakota Department of Health.
5. The February 23, 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.
6. To the extent there are any conflicts or inconsistencies between Basin Electric's application and the February 23, 2015 Certification, the Certification provisions control.

PUBLIC SERVICE COMMISSION

**Randy Christmann
Commissioner**

**Julie Fedorchak
Chairman**

**Brian P. Kalk
Commissioner**