



AIR POLLUTION CONTROL PERMIT TO CONSTRUCT

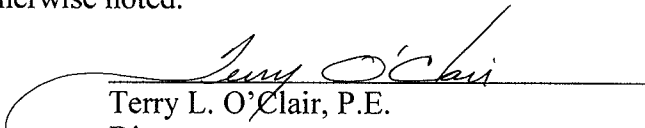
<p>Permittee: Name: Basin Electric Power Cooperative</p> <p>Address: 1717 E Interstate Avenue Bismarck, ND 58503-0564</p>	<p>Permit Number: PTC 13037</p> <p>Source Name: Pioneer Generating Station</p>
<p>Source Location: Sec. 20, T155N, R103W Williams County</p>	<p>Source Type: Combustion Turbines</p>

Expiration Date:

See Condition 6.C.2

Pursuant to Chapter 23-25 of the North Dakota Century Code, and the Air Pollution Control Rules of the State of North Dakota, Article 33-15 of the North Dakota Administrative Code (NDAC), and in reliance on statements and representations heretofore made by the permittee designated above, a Permit to Construct is hereby issued authorizing such permittee to construct and initially operate the emissions unit(s) at the location designated above. This Permit to Construct is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Health and to any conditions specified on the following pages. All conditions are enforceable by EPA and citizens under the Clean Air Act unless otherwise noted.

Issued: 5/14/2013


 Terry L. O'Clair, P.E.
 Director
 Division of Air Quality

Pioneer Generating Station
Permit to Construct
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Abbreviations and Acronyms

acfm	-	Actual Cubic Feet Per Minute
ASTM	-	American Society for Testing and Materials
avg.	-	Average
BACT	-	Best Available Control Technology
BEPC	-	Basin Electric Power Cooperative
BMP	-	Best Management Practices
CatOx	-	Catalytic Oxidation
CEMS	-	Continuous Emissions Monitoring System
CO	-	Carbon Monoxide
CO ₂	-	Carbon Dioxide
CO ₂ e	-	Carbon Dioxide Equivalent
CPM	-	Condensable Particulate Matter
CT	-	Combustion Turbine
dscf	-	Dry Standard Cubic Feet
EP	-	Emission Point
EU	-	Emission Unit
Fug.	-	Fugitive
GHG	-	Greenhouse Gases
gr	-	Grains
HAP	-	Hazardous Air Pollutant
HHV	-	Higher Heating Value
hr	-	Hour

lb/hr	-	Pounds Per Hour
lb/10 ⁶ Btu	-	Pounds Per Million British Thermal Units
lb/MWe-hr	-	Pounds Per Megawatt Hour
LDAR	-	Leak Detection and Repair
MWe	-	Megawatts of Electricity
NO _x	-	Nitrogen Oxides
N/A	-	Not Applicable
NSPS	-	New Source Performance Standards (40 CFR 60)
PM	-	Particulate Matter
PM ₁₀	-	Particulate Matter with an Aerodynamic Diameter Equal to or Less Than 10 Micrometers in Diameter
PM _{2.5}	-	Particulate Matter with an Aerodynamic Diameter Less Than or Equal to 2.5 Micrometers
ppmvd	-	Parts per Million by Volume on a Dry Basis
PSD	-	Prevention of Significant Deterioration
r.a.	-	Rolling average
scf	-	Standard Cubic Feet
SCR	-	Selective Catalytic Reduction
SO ₂	-	Sulfur Dioxide
TBD	-	To Be Determined
VOC	-	Volatile Organic Compounds
4 h.r.a.	-	4-hour Rolling Average
8 h.r.a.	-	8-hour Rolling Average
12 m.r.t.	-	12 Month Rolling Total

1. General Information:

- A. Facility Name: Pioneer Generating Station
- B. Existing Source Classification: PSD Major Source, HAP Area Source
- C. Process Description: BEPC has proposed to construct an electrical generating station consisting of three natural gas-fired combustion turbines. All three turbines are GE Model LM6000 PC SPRINT with a nominal maximum rating of 46.3 MWe and a nominal maximum heat input of 451×10^6 Btu/hr each.
- D. Existing Permit to Construct: On March 13, 2012, BEPC was issued Permit to Construct No. PTC12006 for Unit 1 at the Pioneer Generating Station. Once this Permit to Construct is issued, Permit to Construct No. PTC12006 is rescinded.

2. Emission Unit(s) Identification:

The new emission units regulated by this permit are as follows:

Table 1
 Emission Units

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Unit 1 - Combustion Turbine	1	1	SCR + CatOx
Unit 2 - Combustion Turbine	2	2	SCR + CatOx
Unit 3 - Combustion Turbine	3	3	SCR + CatOx
Fugitive – Methane Emissions	Fug.	Fug.	N.A.

3. Construction Restrictions:

- A. This Permit to Construct allows the construction and initial operation of the above-mentioned emission units. The source units may be operated under this Permit to Construct until a Title V Permit to Operate for the Pioneer Generating Station is issued unless this permit is suspended or revoked. The source is subject to all applicable rules, regulations, and orders now or hereafter in effect of the North Dakota Department of Health (hereafter referred to as the Department) and to the conditions specified herein.
- B. This Permit to Construct is issued in reliance upon the accuracy and completeness of the information set forth in the application. Notwithstanding the tentative nature of this information, the conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23-25. Each and every condition of this permit is a material part thereof, and is not severable.

Applicable Requirement: NDAC 33-15-14-02

4. **Fuel Restrictions:**

- A. Pipeline Quality Natural Gas: EU 1, 2 and 3 shall be operated using only pipeline quality natural gas as defined in NDAC 33-15-01. The sulfur content of the gas shall not exceed 2 gr/100 scf.

Applicable Requirement: NDAC 33-15-14-02.9.f

5. **Emission Unit(s) Limits:**

- A. Combustion Turbine NO_x:

For purposes of determining compliance with the NO_x limits on a ppm basis specified in Condition 5.D, the procedures specified in 40 CFR 60, Subpart KKKK shall be used. The permittee shall calculate a rolling average if a valid NO_x emission rate is obtained for at least 3 of the 4 hours. For 4-hour rolling periods during which the two different limits apply, the allowable emission rate is the average of the applicable limit during each hour. The higher limit applies for the hour if at any point in the hour, the unit was subject to the higher limit.

Applicable Requirement: NDAC 33-15-12-02, Subpart KKKK and NDAC 33-15-14-02.9

- B. Combustion Turbine CO:

For purposes of determining compliance with the ppmvd emission limit in Condition 5.D, the permittee shall calculate a 8-hour rolling average (ppm basis) if a valid CO emission rate is obtained for at least 6 of the 8 hours in which each unit is operating (excludes startup).

Applicable Requirement: NDAC 33-15-14-02.9

- C. Combustion Turbine GHG Emissions:

The permittee shall determine compliance with the GHG limit (CO₂e) specified in Condition 5.D using one of the methods in 40 CFR 75.10(a)(3) to determine CO₂ emissions and adding emissions of nitrous oxide (N₂O) and methane (CH₄) which are calculated on a CO₂e basis. The methane and nitrous oxide emissions (CO₂e basis) shall be determined using emission factors and global warming potentials in 40 CFR 98, along with the heat input to the turbine. The heat input to the turbine shall be calculated from the amount of natural gas burned (as measured in accordance with Condition 8.G.) and the higher heating value of the natural gas. All emission rates shall be converted to short tons. Other site specific emission factors for the N₂O and CH₄ emission rates and methods for calculating the heat input to the turbine may be used provided they are approved by the Department in advance.

Applicable Requirement: NDAC 33-15-14-02.9

D. Emission Limits:

Table 2
Emission Limits

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit	Applicable Requirement
Combustion Turbine	1-3	1-3	NO _x ¹	5.0 ppmvd @ 15% O ₂ (4 h.r.a.)	NDAC 33-15-15-01.2 BACT
			NO _x (startup) ²	19.0 lb per startup (each CT)	NDAC 33-15-15-01.2 BACT
			NO _x ³	39.0 lb/hr (total) (1-hr block avg.)	NDAC 33-15-15-01.2 BACT
			CO ¹	6.0 ppmvd @ 15% O ₂ (8 h.r.a.)	NDAC 33-15-15-01.2 BACT
			CO (startup) ²	57.2 lb per startup (each CT)	NDAC 33-15-15-01.2 BACT
			CO ³	87.1 lb/hr (total) (1-hr block avg.)	NDAC 33-15-15-01.2 BACT
			PM ₁₀ /PM _{2.5} ⁴ (filterable and condensable)	5.4 lb/hr (each CT)	NDAC 33-15-15-01.2 BACT
			SO ₂	See Condition 4	NDAC 33-15-15-01.2 BACT
			Visible Emissions	20% Opacity (see Condition 5.E)	NDAC 33-15-15-01.2 BACT
			GHG (CO ₂ e)	243,147 tons (each) (12-m.r.t.)	NDAC 33-15-15-01.2 BACT
Fugitive Methane Emissions	Fug.	Fug.	Fug.	LDAR (see Condition 6.A)	NDAC 33-15-15-01.2 BACT

¹ Does not apply during startup.

² Startup is defined to begin at initial firing of the combustion turbine and includes the time necessary to reach the oxidation catalyst and SCR temperatures needed for effective CO and NO_x control. For purposes of this condition, the limit applies only for the 60-minute period which begins when startup commences.

³ Applies at all times including startup and shutdown. Total for three turbines calculated as the sum of the 1-hour block average emission rates for each unit.

⁴ Average of three test runs.

E. Visible Emissions Limits:

The emission units listed above shall not exceed the following opacity limits:

- 1) Point Sources: Twenty percent, except that a maximum of 40% is permissible for not more than one six-minute period per hour. This limit applies at all times. Compliance with this visible emissions limit shall be determined by conducting observations in accordance with NDAC 33-15-03-05 (Method 9 of 40 CFR 60, Appendix A as incorporated by reference into NDAC 33-15-12).

Applicable Requirement: NDAC 33-15-03-02

- 2) Fugitive Emissions: The permittee shall not discharge into the ambient air any air contaminant which exhibits an opacity greater than 40% for more than one six-minute period per hour. Such visible emissions shall have been visibly transported off the property of emission origination and remains visible to an observer positioned off said property when sighting along a line which does not cross the property of emission origination.

Applicable Requirement: NDAC 33-15-03-03

- F. Stack Height – Stacks for the combustion turbines (EP 1-3) shall extend at least 80 feet above ground level.

6. **Other Conditions:**

- A. Fugitive Methane LDAR: The permittee shall implement an instrumental leak detection and repair program to minimize emissions of methane from the facility. The program shall include quarterly leak inspections. A leak is detected when the instrument measures a concentration of 500 ppm or more above background. Repairs must be made as soon as practicable.

Applicable Requirement: NDAC 33-15-01.2 – BACT

- B. Compliance: The permittee shall comply with all State and Federal environmental laws and rules. In addition, the permittee shall comply with all local building, fire, zoning, and other applicable ordinances, codes, rules and regulations.

Applicable Requirement: NDAC 33-15-14-02.9

- C. Construction: Construction of the facility shall be in accordance with information provided in the Permit to Construct application as well as any plans, specifications and supporting data submitted to the Department.

- 1) Deviations:

- a) The Department shall be notified at least ten days in advance of any significant deviations from the Permit to Construct application as well as any plans, specifications or supporting data furnished. The issuance of this Permit to

Construct may be suspended or revoked if the Department determines that a significant deviation from the plans permit application, specifications, and supporting data furnished has been or is to be made.

- b) Any violation of a condition issued as part of this Permit to Construct as well as any construction which proceeds in variance with any information submitted in the application, is regarded as a violation of construction authority and is subject to enforcement action.

Applicable Requirement: NDAC 33-15-14-02.9

- 2) Construction Commencement: This Permit to Construct shall become invalid if construction is not commenced within eighteen months after receipt of such permit, if construction is discontinued for a period of eighteen months or more; or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

Applicable Requirement: NDAC 33-15-14-02.10

- 3) Initial Startup: A notification of the anticipated date of initial startup of the facility must be submitted to the Department not more than 60 days nor less than 15 days prior to such date. A notification of the actual date of initial startup shall be submitted within 15 days after such date.

Applicable Requirement: NDAC 33-15-14-02.9.d

- 4) Permit Application Processing: The permittee shall pay permit application processing fees in accordance with NDAC 33-15-23-02.2.

Applicable Requirement: NDAC 33-15-23-02.2

D. Best Management Practices:

General: At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected emission unit including associated air pollution control equipment in a manner consistent with good air pollution control and good combustion practice for minimizing emissions.

Applicable Requirement: NDAC 33-15-14-02.9

E. New Source Performance Standards (NSPS): The permittee shall comply with the applicable requirements of NDAC 33-15-12-02 including:

Subpart A - General Provisions

Subpart KKKK - Standards of Performance for Stationary Gas Turbines

Applicable Requirement: NDAC 33-15-12

F. Acid Rain Program:

The permittee shall comply with the applicable requirements of 40 CFR 72, 75 and 76. The permittee shall hold sulfur dioxide allowances, as of the allowance transfer deadline, in the unit's subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit.

Applicable Requirement: NDAC 33-15-21

G. Title V Permit to Operate Application:

Within 12 months after commencing operation of the first turbine, the permittee shall submit an application for a Title V Permit to Operate for the Pioneer Generating Station.

Applicable Requirement: NDAC 33-15-14-06

7. **Emissions Testing:**

A. Initial Testing: Within 60 days after achieving the maximum production rate at the plant, but not later than 180 days after startup, the permittee shall conduct emissions tests using an independent testing firm, to determine the compliance status of the facility with respect to the emission limits specified in Table 2. The continuous emissions monitors required under the Acid Rain Program and this permit for the combustion turbine shall be certified (performance evaluations completed and requirements met) within the time frames specified above and prior to the emissions test for the pollutant the CEMS is measuring. The testing of the emissions unit shall be accomplished in accordance with the requirements listed below:

Table 3
 Emissions Testing

Emission Unit Description	EU	EP	Contaminant	Number of Runs	Length of Runs (min.)	Test Method(s)
Combustion Turbine	1-3	1-3	PM ₁₀ /PM _{2.5} (filterable)	3	120 (minimum)	1-4, 201a
			PM ₁₀ /PM _{2.5} (CPM)	3	120 (minimum)	202
			NO _x	N/A	N/A	CEMS
			CO	N/A	N/A	CEMS
			CO ₂	N/A	N/A	Methods in 40 CFR 75.10(a)(3)
			Opacity	3	18	9

NOTE: Test methods and sampling times different from those listed in Table 3 may be used if approved in advance by the Department.

Applicable Requirements: NDAC 33-15-12 and NDAC 33-15-14-02.9.b

- B. Notification: The permittee shall notify the Department using the form in the Emission Testing Guideline, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department at least five days prior to the scheduled test date and coordinate a new test date with the Department.

Applicable Requirement: NDAC 33-15-01-12.1

- C. Sampling Ports/Access:

- 1) Sampling ports shall be provided downstream of all emission control devices and in a flue, conduit, duct, stack or chimney arranged to conduct emissions to the ambient air.
- 2) The ports shall be located to allow for reliable sampling and shall be adequate for test methods applicable to the facility. Safe sampling platforms and safe access to the platforms shall be provided. Plans and specifications showing the size and location of the ports, platform and utilities shall be submitted to the Department for review and approval.
- 3) Where the emission point is not a stack (e.g. blower) the permittee shall construct the appropriate temporary ducting or stack as necessary to assure an accurate test, when directed to do so by the Department.

Applicable Requirement: NDAC 33-15-14-02.14

8. **Monitoring Requirements and Conditions:**

- A. Requirements: Monitoring shall be in accordance with the requirements of all applicable regulations and directives including those in 40 CFR 60, Subpart KKKK and 40 CFR 75.
- G. Carbon Monoxide CEMS: The permittee shall install, calibrate, operate and maintain equipment for continuously monitoring the carbon monoxide emission rate from the stack. The systems shall report carbon monoxide emissions in units of ppmvd and lb/hr. The monitoring systems shall comply with the requirements of 40 CFR 60, Appendix B, Performance Specification 4. Quality assurance shall be in accordance with 40 CFR 60, Appendix F.
- H. Other CEMs: The permittee shall install, calibrate, operate and maintain continuous emission monitors for nitrogen oxides and oxygen in accordance with the requirements of 40 CFR 75 and 40 CFR 60, Subpart KKKK.
- I. The permittee shall install, calibrate, operate and maintain equipment for measuring and recording the gross energy output (MWe) on a hourly basis in accordance with 40 CFR 60, Subpart KKKK.

- J. The permittee shall install, calibrate, operate, and maintain equipment to measure and record the ambient temperature at the site on an hourly basis in accordance with 40 CFR 60, Subpart KKKK.
- K. The permittee shall install, calibrate, operate and maintain equipment to measure and record the quantity of natural gas combusted in each combustion turbine (EU 1, 2 and 3) in accordance with 40 CFR 60, Subpart KKKK.
- L. The permittee shall determine the gross calorific value of the fuel monthly using the procedures in 40 CFR 75, Appendix F, Section 5.5.2.

Applicable Requirements: NDAC 33-15-14-02.9, NDAC 33-15-12, NDAC 33-15-21

9. **Recordkeeping:** All records required by this permit shall be kept on file for a period of five years. The records shall be available for inspection by Department personnel and shall be submitted to the Department upon request. In addition to maintaining the records required by any of the applicable regulations as listed in Condition 10 below, the following records shall be maintained:
- A. All stack tests results including field data, laboratory analysis data, and quality assurance data.
 - B. All continuous emission monitoring data required by this permit, 40 CFR 60 and 40 CFR 75.
 - C. The results of all visible emissions observations and any corrective actions taken.
 - D. Quarterly inspection results for methane leaks and any repairs completed.
 - E. The occurrence of any startup or shutdown.
 - F. Ambient temperatures on an hourly basis.
 - G. Generator gross energy output (MWe).
 - H. Amount of natural gas combusted in EU 1, 2 and 3.
 - I. Fuel gross calorific values.

Applicable Requirements: NDAC 33-15-12 and NDAC 33-15-14-02.9.d

10. **Reporting:**

- A. Reporting shall be in accordance with the following applicable requirements of Chapter 33-15-12, Chapter 33-15-14 and Chapter 33-15-21 of the North Dakota Air Pollution Control Rules.
 - 1) 40 CFR 60, Subpart A, Section 60.7, Notification and Recordkeeping.
 - 2) 40 CFR 60, Subpart KKKK, Section 60.4375, Reporting Requirements.

- 3) Subdivision 33-15-21-01.6.f of the North Dakota Air Pollution Control Rules, Reporting and Recordkeeping Requirements.
- 4) Quarterly excess emissions reports for EUs 1-3 shall be submitted by the 30th day following the end of each 3-month period. Excess emissions are defined as emission rates which exceed the emission limits outlined in Condition 5. Excess emissions shall be reported for the following:

<u>Emission Unit</u>	<u>Parameter</u>	<u>Averaging Period</u>
Combustion Turbine	NO _x (ppmvd)	4-h.r.a.
	NO _x (lb/hr)	1-hr block avg.
	NO _x (lb/hr)	Per startup or shutdown event
	CO (ppmvd)	8-h.r.a.
	CO (lb/hr)	1-hr block avg.
	CO (lb/hr)	Per startup or shutdown event
	CO ₂ e (tons)	12 m.r.t.

Applicable Requirements: NDAC 33-15-12 and NDAC 33-15-14

B. Semi-Annual Report:

The permittee shall submit to the Department a semi-annual report on the operation of the facility. The report shall include any deviations from the requirements of this permit.

The report shall be submitted within 45 days after June 30 and December 31 of each year. The report shall be signed by the responsible official and shall state that “based on information and belief formed after reasonable inquiry, the statements and information contained in this report are true, accurate and complete.”

Applicable Requirements: NDAC 33-15-14-06

C. Annual Compliance Certification Report:

The permittee shall submit an annual compliance certification report on forms supplied by the Department, or approved alternate forms, within 45 days after December 31 of each year. The annual report shall include all of the following (the identification of applicable information pertaining to compliance may cross-reference the permit or previous reports, as applicable):

- 1) The identification of each term or condition of the permit that is the basis of the certification.
- 2) The identification of the method(s) or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether compliance was continuous or intermittent. Such methods and other means shall include, at a minimum, the methods and means required under this permit. If necessary,

the owner or operator also shall identify any other material information that is the basis for the certification.

- 3) The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in the permit.
- 4) Such other facts as the Department may require to determine the compliance status of the source.

Applicable Requirements: NDAC 33-15-14-06

D. Annual Emission Inventory Reports:

The permittee shall submit an annual emission inventory report on forms supplied or approved by the Department. This report shall be submitted by March 15 of each calendar year. Insignificant units/activities listed in this permit do not need to be included in the report.

Applicable Requirements: NDAC 33-15-14-06.5.a(7) and NDAC 33-15-23-04

11. **Facility Wide Operating Conditions:**

A. Ambient Air Quality Standards:

- 1) Particulate and gases: The permittee shall not emit air contaminants in such a manner or amount that would violate the standards of ambient air quality listed in Table 1 of NDAC 33-15-02 at any place beyond the premises on which the source is located.
- 2) Radioactive substances: The permittee shall not release into the ambient air any radioactive substances exceeding the concentrations specified in NDAC 33-10.
- 3) Other air contaminants: The permittee shall not emit any other air contaminants in concentrations that would be injurious to human health or well-being or unreasonably interfere with the enjoyment of property or that would injure plant or animal life.
- 4) Disclaimer: Nothing in any other part or section of this permit may in any manner be construed as authorizing or legalizing the emission of air contaminants in such manner that would violate the standards in Paragraphs 1, 2 and 3 of this condition.

Applicable Requirement: NDAC 33-15-02-04

B. Fugitive Emissions: The release of fugitive emissions shall comply with the applicable requirements in NDAC 33-15-17.

Applicable Requirement: NDAC 33-15-17

C. Open Burning: The permittee shall comply with open burning restrictions in NDAC 33-15-04.

Applicable Requirement: NDAC 33-15-04

- D. Asbestos Renovation or Demolition: Any asbestos renovation or demolition at the facility shall comply with emission standard for asbestos in NDAC 33-15-13.

Applicable Requirement: NDAC 33-15-13-02

- E. Requirements for Organic Compounds Gas Disposal:

- 1) The owner/operator shall incinerate, flare or treat in an equally effective manner any organic compounds, gases and vapors which are generated as wastes as the result of storage, refining, or process operations and which contain hydrogen sulfide before being released to the ambient air.
- 2) Each flare must be equipped and operated with an automatic ignitor or a continuous burning pilot.

Applicable Requirement: NDAC 33-15-07-02

- F. Rotating Pumps and Compressors: All rotating pumps and compressors handling volatile organic compounds must be equipped and operated with properly maintained seals designed for their specific product service and operating conditions.

Applicable Requirement: NDAC 33-15-07-01.5

- G. Shutdown/Malfunions/Deviation from Permit Requirements:

- 1) In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shutdown equipment shall be reported to the Department at least 24 hours prior to the planned shutdown provided that the air contaminating source will be operated while the control equipment is not in service. Such prior notice shall include the following:
 - a) Identification of the specific emission unit to be taken out of service as well as its location and permit number.
 - b) The expected length of time that the air pollution control equipment will be out of service.
 - c) The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.
 - d) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period.
 - e) The reasons that it would be impossible or impractical to shutdown the source operating during the maintenance period.

Applicable Requirement: NDAC 33-15-01-13.1

- 2) When a malfunction in any installation or deviation from permit requirements occurs that can be expected to last longer than 24-hours and cause the emission of air contaminants in violation of this permit or any other applicable rules and regulations, the person responsible for such installation or deviation from permit requirements shall notify the Department of such malfunction or deviation from permit requirements as soon as possible during normal working hours. The notification must contain a statement giving all pertinent facts, including the estimated duration of the breakdown, if applicable. On receipt of this notification, the Department may permit the continuance of the operation for a period not to exceed ten days provided that written application is made to the Department. Such application shall be made within 24-hours of the malfunction or deviation from permit requirements. In cases of major equipment failure, additional time period may be granted by the Department provided a corrective program has been submitted by the permittee and approved by the Department. The Department shall be notified when the condition causing the malfunction has been corrected.
- 3) Immediate notification to the Department is required for any malfunction that would threaten health or welfare, or pose an imminent danger. During normal working hours the Department can be contacted at (701)328-5188. After hours the Department can be contacted through the 24-hour State radio emergency number 1-800-472-2121. If calling from out-of-state, the 24-hour number is (701)328-2121.

Applicable Requirements: NDAC 33-15-01-13.1, NDAC 33-15-01-13.2.a and b

- H. Vehicles and Internal Combustion Engines: No person shall operate, or cause to be operated, any internal combustion engine which emits from any source any unreasonable and excessive smoke, obnoxious or noxious gases, fumes or vapor.

Applicable Requirement: NDAC 33-15-08-01

- I. Prohibition of Air Pollution:

- 1) The permittee shall not permit or cause air pollution, as defined in NDAC 33-15-01-04.
- 2) Nothing in any other part of this permit or any other regulation relating to air pollution shall in any manner be construed as authorizing or legalizing the creation or maintenance of air pollution.

Applicable Requirement: NDAC 33-15-01-15

- J. Performance Tests:

- 1) The Department may reasonably require the permittee to make or have made tests, at a reasonable time or interval, to determine the emission of air contaminants from any source, for the purpose of determining whether the permittee is in violation of any standard or to satisfy other requirements of NDCC 23-25. All tests shall be made and the results calculated in accordance with test procedures approved or specified by the Department

including the North Dakota Department of Health Emission Testing Guideline. All tests shall be conducted by reputable, qualified personnel. The Department shall be given a copy of the test results in writing and signed by the person responsible for the tests.

- 2) The Department may conduct tests of emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

Applicable Requirement: NDAC 33-15-01-12

- 3) Except for sources subject to 40 CFR 63, the permittee shall notify the Department by submitting a Proposed Test Plan, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. The permittee shall notify the Department at least 60 calendar days in advance of any performance testing required under 40 CFR 63. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department as soon as practicable when conditions warrant, and shall coordinate a new test date with the Department.

Failure to give the proper notification may prevent the Department from observing the test. If the Department is unable to observe the test because of improper notification, the test results may be rejected.

Applicable Requirements: NDAC 33-15-01-12, NDAC 33-15-14-02.9 and NDAC 33-15-12-02 Subpart A (40 CFR 60.8)

- K. Pesticide Use and Disposal: Any use of a pesticide or disposal of surplus pesticides and empty pesticide containers shall comply with the requirements in NDAC 33-15-10.

Applicable Requirements: NDAC 33-15-10-01 and NDAC 33-15-10-02

- L. Air Pollution Emergency Episodes: When an air pollution emergency episode is declared by the Department, the permittee shall comply with the requirements in NDAC 33-15-11.

Applicable Requirements: NDAC 33-15-11-01 through NDAC 33-15-11-04

- M. Stratospheric Ozone Protection: The permittee shall comply with any applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.
- 2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.

- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.
- 4) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to Section 82.156.

Applicable Requirement: 40 CFR 82

N. Chemical Accident Prevention: The permittee shall comply with all applicable requirements of Chemical Accident Prevention pursuant to 40 CFR 68. The permittee shall comply with the requirements of this part no later than the latest of the following dates:

- 1) Three years after the date on which a regulated substance is first listed under this part; or
- 2) The date on which a regulated substance is first present above a threshold quantity in a process.

Applicable Requirement: 40 CFR 68

12. **General Conditions:**

A. Annual Fee Payment: The permittee shall pay an annual fee, for administering and monitoring compliance, which is determined by the actual annual emissions of regulated contaminants from the previous calendar year. The Department will send a notice, identifying the amount of the annual permit fee, to the permittee of each affected installation. The fee is due within sixty days following the date of such notice. Any source that qualifies as a "small business" may petition the Department to reduce or exempt any fee required under this section. Failure to pay the fee in a timely manner or submit a certification for exemption may cause this Department to initiate action to revoke the permit.

Applicable Requirements: NDAC 33-15-23-04

B. Transfer of Ownership or Operation: This permit may not be transferred except by procedures allowed in Chapter 33-15-14 and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit. A change in ownership or operational control of a source is treated as an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

Applicable Requirement: NDAC 33-15-14-02.11

C. Submissions:

- 1) Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to:

North Dakota Department of Health
Division of Air Quality
918 E Divide Avenue, 2nd Floor
Bismarck, ND 58501-1947

- 2) Any document submitted shall be certified as being true, accurate, and complete by a responsible official.

Applicable Requirement: NDAC 33-15-14-02.9

- D. Right of Entry: Any duly authorized officer, employee or agent of the North Dakota Department of Health may enter and inspect any property, premise or place listed on this permit or where records are kept concerning this permit at any reasonable time for the purpose of ascertaining the state of compliance with this permit and the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source, The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

Applicable Requirement: NDAC 33-15-01-06

- E. Compliance: The permittee must comply with all conditions of this permit. Any noncompliance with a federally-enforceable permit condition constitutes a violation of the Federal Clean Air Act. Any noncompliance with any State enforceable condition of this permit constitutes a violation of NDCC 23-25 and NDAC 33-15. Violation of any condition of this permit is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Noncompliance may also be grounds for assessment of penalties under the NDCC Chapter 23-25. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Applicable Requirement: NDAC 33-15-14-02.15

- F. Nuisance or Danger: This permit shall in no way authorize the maintenance of a nuisance or a danger to public health or safety.

Applicable Requirement: NDAC 33-15-02-03

13. **State Enforceable Only Conditions (not Federally enforceable):**

General Odor Restriction: The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which exceeds the limits established in NDAC 33-15-16.

Applicable Requirement: NDAC 33-15-16

14. **Acid Rain Provisions:**

Affected Source Unit: Pioneer Generating Station
ORIS Plant Code: 57881
Unit ID: CT-1, CT-2, CT-3

This section incorporates the definition of terms in NDAC Chapter 33-15-21 by reference.

A. Permit Requirements:

- 1) The designated representative of each affected source and each affected unit at the source shall:
 - a) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR 72 in accordance with the deadlines specified in NDAC 33-15-21-08.1 and 40 CFR 72.30, including application for permit renewal; and
 - b) Submit in a timely manner any supplemental information that the North Dakota Department of Health, Division of Air Quality, Air Pollution Control Program determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit.
- 2) The owners and operators of each affected source and each affected unit at the source shall:
 - a) Operate the unit in compliance with a complete Acid Rain permit application including any application for permit renewal or a superseding Acid Rain permit issued by the North Dakota Department of Health, Division of Air Quality, Air Pollution Control Program and
 - b) Have an Acid Rain permit.

Applicable Requirement: NDAC 33-15-21-08.1

B. Monitoring Requirements:

- 1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR 75.
- 2) The emissions measurements recorded and reported in accordance with 40 CFR 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide under the Acid Rain Program.
- 3) The requirements of 40 CFR 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Federal Clean Air Act and other provisions of the operating permit for the source.

Applicable Requirements: NDAC 33-15-21-09, NDAC 33-15-21-10 and 40 CFR 75

C. Sulfur Dioxide Requirements:

- 1) The owners and operators of each source and each affected unit at the source shall:
 - a) Hold allowances, as of the allowance transfer deadline, in the units compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - b) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- 2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Federal Clean Air Act.
- 3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - a) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - b) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR 75, an affected unit under 40 CFR 72.6(a)(3).
- 4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- 5) An allowance shall not be deducted in order to comply with the requirements under Condition 14.C.(1)(a) of this permit prior to the calendar year for which the allowance was allocated.
- 6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, this permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- 7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Applicable Requirements: NDAC 33-15-21-08.1 and 40 CFR 72 and 73

D. Excess Emissions Requirements:

- 1) The designated representative of an affected unit that has excess emissions of SO₂ in any calendar year shall submit a proposed offset plan, to the Administrator as required under 40 CFR 77, with a copy to the North Dakota Department of Health, Division of Air Quality, Air Pollution Control Program.

- 2) The owners and operators of an affected unit that has excess emissions of SO₂ in any calendar year shall:
 - a) Pay to the Administrator without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR 77; and
 - b) Comply with the terms of an approved offset plan for SO₂, as required by 40 CFR 77.

Applicable Requirements: NDAC 33-15-21-08.1 and 40 CFR 77

E. Recordkeeping and Reporting Requirements:

- 1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on-site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator of the U.S. EPA or the North Dakota Department of Health, Division of Air Quality, Air Pollution Control Program:
 - a) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on-site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - b) All emissions monitoring information, in accordance with 40 CFR 75, provided that to the extent that 40 CFR 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - d) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- 2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72, Subpart I and 40 CFR 75.

Applicable Requirements: NDAC 33-15-21-08.1 and NDAC 33-15-21-09

F. Liability:

- 1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, this Acid Rain Permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to Section 113(c) of the Federal Clean Air Act.
- 2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Federal Clean Air Act and 18 U.S.C. 1001.
- 3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- 4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- 5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- 6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- 7) Each violation of a provision of NDAC 33-15-21-08.1 and NDAC 33-15-21-09 and 40 CFR 73, 74, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Federal Clean Air Act.

Applicable Requirements: NDAC 33-15-21-08.1, NDAC 33-15-21-09 and 40 CFR 73, 74, 77 and 78

G. Effect on Other Authorities:

No provision of the Acid Rain Program, an Acid Rain permit application, this Acid Rain permit condition, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- 1) Except as expressly provided in Title IV of the Federal Clean Air Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Federal Clean Air Act, including the provisions of Title I of the Federal Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

- 2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Federal Clean Air Act,
- 3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- 4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- 5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Applicable Requirement: NDAC 33-15-21-08.1

H. Permit Shield:

Each affected unit operating in accordance with this permit which is issued in compliance with Title IV of the Federal Clean Air Act, as provided in NDAC 33-15-21-08.1, NDAC 33-15-21-09 and 40 CFR 73, 77 and 78, and the regulations implementing Section 407 of the Federal Clean Air Act, shall be deemed operating in compliance with the Acid Rain Program, except as provided in 40 CFR 72.9(g)(6). The permit shield does not take effect until the effective date of the acid rain permit.

Applicable Requirements: NDAC 33-15-21-08.1, NDAC 33-15-21-09 and 40 CFR 73, 77 and 78

I. Reopening for Cause:

In addition to any reasons for reopening for cause previously stated in this permit, the Department will reopen and revise this permit as necessary to remedy deficiencies in the following circumstance: If additional requirements, including excess emissions requirements, become applicable to an affected source under Title IV of the Federal Clean Air Act or the regulations promulgated there under. Upon approval by the administrator of the United States Environmental Protection Agency, excess emissions offset plans shall be deemed to be incorporated into the permit.

Applicable Requirement: NDAC 33-15-14-06.6.f.(1)(b)