

**AIR EMISSION PERMIT NO. 03700015- 002**

**IS ISSUED TO**

**Northern States Power Company d/b/a Xcel Energy**

NSP d/b/a Xcel Energy - Inver Hills  
3185 117th Street East  
Inver Grove Heights, Dakota County, MN 55077

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date	Issue Date	Action Number
Major Amendment	12/29/1999	July 25, 2000	001
Total Facility Operating Permit	02/12/1996		
Major Amendment	11/20/2002	See below	002

This permit authorizes the permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are defined in the state air pollution control rules unless the term is explicitly defined in the permit.

**Permit Type:** Federal; Part 70/Major for NSR

**Issue Date:** September 10, 2003

**Expiration:** July 25, 2005

All Title I Conditions do not expire.

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Ann M. Foss  
Major Facilities Section Manager  
Majors and Remediation Division

for Sheryl A. Corrigan  
Commissioner  
Minnesota Pollution Control Agency

## **TABLE OF CONTENTS**

**Notice to the Permittee**

**Permit Shield**

**Facility Description**

**Table A: Limits and Other Requirements**

**Table B: Submittals**

**Table C: Compliance Schedule - not used in this permit**

**Appendices: Attached and Referenced in Table A**

**NOTICE TO THE PERMITTEE:**

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

**PERMIT SHIELD:**

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

## **FACILITY DESCRIPTION:**

The Inver Hills Generating Plant is a peak electrical generation facility with a capacity of 440 Megawatts. The facility is composed of six identical pre-NSPS General Electric natural gas or fuel oil-fired simple cycle combustion turbine/generator sets, and two post-1990 Caterpillar emergency diesel-fired reciprocating internal combustion engine generators. Gas turbine fuel is primarily natural gas, and fuel oil is used mostly during curtailment of natural gas. The Permittee has indicated that historically the overall fuel usage for the turbines is 90% natural gas and 10% fuel oil.

Distillate and residual oil storage consists of three 10 million gallon above ground storage tanks. The turbines are not subject to title IV because they commenced operation before November 15, 1990, (§72.6(b)(1)). The two Caterpillar emergency generators are grid connected and therefore subject to Title IV. The Permittee has applied for a new unit exemption and has committed to limit diesel fuel sulfur content to 0.05 % by weight.

## **PER 002**

Title V state-only computer dispersion modeling requirements have been revised to reflect the current 2001 policy. Instead of submittal of a protocol and results, the permit now requires submittal of modeling information only.

In addition, this permitting action removes the GP 001 48 lb/hr/unit carbon monoxide (CO) emission increase limit while combusting natural gas and operating the inlet fogging system, the 99 tons per year (tpy) CO and nitrogen oxide (NO<sub>x</sub>) emission increase limits while operating the inlet fogging system, recordkeeping for increased CO and NO<sub>x</sub> emissions while operating the inlet fogging system, and optional stack testing while operating the inlet fogging system and combusting fuel oil. The basis for the removal of these requirements is:

- 1) the results of August 2000 NO<sub>x</sub> and CO testing while combusting natural gas showed a decrease in NO<sub>x</sub> and CO emissions with inlet fogging;
- 2) the 3800 hr/yr total fuel oil combustion hours limit for all 6 gas turbines while operating the inlet fogging system restricts the NO<sub>x</sub> emissions increase from inlet fogging to less than 100 tpy when combusting fuel oil; and,
- 3) the calculated unlimited potential CO emissions increase due to the inlet fogging system is less than 100 tpy when combusting fuel oil.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

**Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.**

**Subject Item:****Total Facility**

<b>What to do</b>	<b>Why to do it</b>
<b>A. OPERATIONAL REQUIREMENTS</b>	hdr
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Parameters Used in Modeling: The stack heights, emission rates, and other parameters used in the modeling for the SO2 SIP are listed in GP 003 of this permit. The Permittee must submit to the Commissioner for approval any revisions of these parameters and must wait for a written approval before making such changes. The information submitted must include, at a minimum, the locations, heights and diameters of the stacks, locations and dimensions of nearby buildings, the velocity and temperatures of the gases emitted, and the emission rates. The plume dispersion characteristics due to the revisions of the information must be equivalent to or better than the dispersion characteristics modeled in the SO2 SIP submittal. The Permittee shall demonstrate this equivalency in the proposal. If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must remodel.	Title I Condition: State Implementation Plan for SO2; Minn. R. 7009.0020
<b>B POLLUTION CONTROL EQUIPMENT REQUIREMENTS</b>	hdr
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
<b>C. TESTING REQUIREMENTS</b>	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Operating and/or production limits will be placed on emission units based on operating conditions during performance testing. Limits set as a result of a performance test (conducted before or after permit issuance) apply until new operating/production limits are set following formal review of a performance test as specified by Minn. R. 7017.2025.	Minn. R. 7017.2025
The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn R. 7017.2001 - 7017.2060.	Minn. R. 7017.2020, subp. 4
<b>D. MONITORING REQUIREMENTS</b>	hdr
Monitoring Activities and Equipment: Where applicable, initialize monitoring activities and install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring activities are not performed or monitoring equipment is not installed and operational prior to permit issuance.	Minn. R. 7007.0800, subp. 4(D)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
E. RECORDKEEPING	hdr
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
State Implementation Plan Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of the required monitoring, sample, measurement, or report that corresponds with the "Title I Condition: State Implementation Plan for SO <sub>2</sub> " requirement.	Title I Condition: State Implementation Plan for SO <sub>2</sub>
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
F. REPORTING	hdr
Oral or Written (faxed) Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.  At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.  At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Deviations from requirements cited as "Title I Conditions: State Implementation Plan for SO2" shall be reported semi-annually with the Semi-annual Deviations Report required by this permit. Reporting shall occur even if there were no deviation for this reporting period.	Minn. R. 7007.0800, subp. 6(C)1; Alternative to SIP Quarterly Report.
Emissions Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through 7019.3010

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

**Subject Item: GP 001 Electric Generating Combustion Turbines**

**Associated Items:** EU 001 Combustion Turbine 1  
 EU 002 Combustion Turbine 2  
 EU 003 Combustion Turbine 3  
 EU 004 Combustion Turbine 4  
 EU 005 Combustion Turbine 5  
 EU 006 Combustion Turbine 6  
 SV 001 Stack 1, Gas Turbine 1  
 SV 002 Stack 2, Gas Turbine 2  
 SV 003 Stack 3, Gas Turbine 3  
 SV 004 Stack 4, Gas Turbine 4  
 SV 005 Stack 5, Gas Turbine 5  
 SV 006 Stack 6, Gas Turbine 6

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
Sulfur Dioxide: less than or equal to 0.67 lbs/million Btu heat input on an instantaneous basis. This limit applies to each unit individually.	Title I Condition: State Implementation Plan for SO <sub>2</sub> ; allowed under Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent once operating temperatures have been attained. This limit applies to each unit individually.	Minn. R. 7011.2300, subp. 1
Fuel Oil Usage: Not to exceed 9.41 million gallons per month on a 12-month rolling average basis.	Title I Condition: State Implementation Plan for SO <sub>2</sub>
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight for all fuels.	Title I Condition: State Implementation Plan for SO <sub>2</sub> ; Alternative SIP limit to the 0.64 limit
Sulfur Content of Fuel: less than or equal to 0.64 percent by weight for all fuels.	Title I Condition: State Implementation Plan for SO <sub>2</sub>
Allowable Fuel Types: Distillate fuel oil, residual fuel oil, and natural gas.	Title I Condition: State Implementation Plan for SO <sub>2</sub> ; Minn. R. 7007.0800, subp. 2
Operating Hours: less than or equal to 3800 hours/year (12-month rolling sum basis) for all six units combined while operating inlet foggers and combusting fuel oil.	Minn. R. 7007.0800, subp. 2 to limit inlet cooling increase of SO <sub>2</sub> and NO <sub>x</sub> emissions to less than 100 tpy to avoid Environmental Review required by Minn. R. 4410.4300
MONITORING REQUIREMENTS	hdr
Fuel Supplier Certification: Keep on site a copy of the fuel supplier certification identifying the type of fuel oil and the percent by weight sulfur content range.	Minn. R. 7007.0800, subp. 4(B); Alternative to SIP monitoring for the Fuel Oil Analysis and SO <sub>2</sub> Emission Rate calculation
Fuel Oil Analysis: The Permittee shall obtain the fuel oil sulfur content and heating value by either of the following methods:  a. By obtaining and retaining a fuel supplier certification from the fuel supplier for each shipment of distillate, residual, or diesel fuel oil delivered to the Facility. Each fuel supplier certification shall include the following information: 1) The name of the supplier; 2) The location of where the sample was drawn for analysis to determine the sulfur content of the fuel oil. Specifically, the certification shall include whether each shipment was sampled as delivered to the Facility, or whether the sample was drawn from the storage tanks at the fuel oil supplier's or oil refiner's facility, or other location; 3) The sulfur content of the fuel oil from which the shipment came;	Title I Condition: State Implementation Plan for SO <sub>2</sub>



# TABLE A: LIMITS AND OTHER REQUIREMENTS

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

<p>Fuel Oil Analysis (cont.):</p> <p>4) The method used to determine the sulfur content shall be American Society for Testing Materials (ASTM) Method D-1552 or another EPA approved ASTM Method as listed in 40 CFR 60, Appendix A, Method 19, Sec. 5.2.2; and</p> <p>5) The heating value (million British Thermal Units per gallon) of the fuel oil determined in accordance with ASTM Methods D-240, D-1989 or other EPA approved methods,</p> <p>OR,</p> <p>b. By sampling and analyzing the fuel in accordance to the following:</p> <p>1) While the fuel tank is being filled, the Permittee shall collect a sample of the fuel delivery in accordance with ASTM Method D-4057 or other EPA approved method;</p> <p>2) The Permittee shall analyze fuel delivery samples to determine the sulfur content in accordance with ASTM Method D-1552 or other approved EPA method and heating value of the fuel in accordance with ASTM Method D-240, D-1989 or other approved EPA method;</p>	<p>Title I Condition: State Implementation Plan for SO2</p>
<p>Fuel Oil Analysis (cont.):</p> <p>3) If the fuel delivery sample analysis result is no greater than 0.64% sulfur, the Permittee shall compute a weighted average sulfur content of the fuel in the tank using the analysis from the fuel delivery sample and any previous value for sulfur content of fuel in the tank.</p> <p>4) If the delivery sample analysis result is greater than 0.64% sulfur, then a sample must be taken from the fuel tank and analyzed for sulfur content and heating value. The Permittee shall use the tank analysis as the new sulfur content and heating value of the fuel in the tank.</p> <p>5) In January and July of each year, the Permittee shall collect a sample from the fuel line to the gas turbines. The sample shall be analyzed for sulfur content and heating value. The results shall be used as the new sulfur content and heating value of the fuel in the tank.</p>	<p>Title I Condition: State Implementation Plan for SO2</p>
<p>Fuel Usage Recordkeeping: By the 15th day of each month, the Permittee shall use daily fuel usage records to calculate the monthly fuel usage on a 12-month rolling average basis.</p>	<p>Title I Condition: State Implementation Plan for SO2</p>
<p>SO2 Emission Rate From Fuel Oil Combustion: The Permittee shall calculate the SO2 emission rate using the sulfur content and heating value with the following formula:</p> $\text{Emissions Rate (lb SO}_2\text{/MMBtu)} = \frac{N \times \% \text{sulfur}}{\text{heating value (Btu/gal)}}$ <p>Where N = 142,000 for distillate oil and 157,000 for residual oil The units for N = Btu lbs SO2/(MMBtu)(gal)</p>	<p>Title I Condition: State Implementation Plan for SO2</p>
<p>RECORDKEEPING</p>	<p>hdr</p>
<p>SO2 and Emissions and Operating Records. The Permittee shall generate and maintain records containing information to demonstrate compliance with the emission limitation and operating requirements. The Permittee shall retain records containing the following information:</p> <p>1) The fuel oil supplier's certifications containing the information listed in the previous monitoring requirement.</p> <p>2) Monthly and 12-month rolling average fuel oil use. The records shall be signed by the person entering information into the record.</p>	<p>Minn. R. 7007.0800, subp. 5 ; Alternative to SIP recordkeeping.</p>
<p>SO2 and Emissions and Operating Records. The Permittee shall generate and maintain records containing information to demonstrate compliance with the emission limitation and operating requirements. The Permittee shall retain records containing the following information:</p> <p>1) The fuel oil supplier's certifications containing the information listed in the previous monitoring requirements and the date of each fuel oil delivery cross-referenced to the certification accompanying that delivery; or the results of the fuel oil analyses for sulfur content (percent by weight) and heating value (million British Thermal Units per gallon), the date the fuel oil was sampled, and the methods used to sample the fuel oil and determine the sulfur content and heating value of the fuel oil.</p> <p>2) Monthly and 12-month rolling average fuel oil use. The records shall be signed by the person entering information into the record.</p>	<p>Title I Condition: State Implementation Plan for SO2</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

<p>Inlet Fogging Daily Recordkeeping: Each day record the following for each emission unit in GP 001 whenever inlet fogging was used:</p> <ol style="list-style-type: none"> <li>1. Start and stop times of inlet fogger operation;</li> <li>2. Individual and total hours of operation of the inlet foggers;</li> <li>3. Type of fuel consumed during inlet fogging operation;</li> <li>4. Time of any fuel changes during inlet fogging operation.</li> </ol>	Minn. R. 7007.0800, subp. 5
<p>Inlet Fogging Monthly Recordkeeping: by the 15th day of each month, calculate and record the inlet fogging operating hours, while combusting fuel oil, for the previous month and the previous 12-month period (12-month rolling sum).</p>	Minn. R. 7007.0800, subp. 5
PERFORMANCE TESTING	hdr
<p>Performance Test: due 180 days after end of each calendar year starting 07/25/2000 to measure Opacity. The tests shall be performed at base load with inlet fogging in operation, while combusting fuel oil, on EU 001 and EU 002 during the first year. Future opacity tests shall be performed with or without inlet fogging in operation, while combusting fuel oil, on one of the untested emission units in GP 001 (EU 003 - EU 006) during each of the four years remaining in the permit term.</p>	Minn. R. 7017.2020, subp. 1
<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests Notifications and Submittals are due as outlined below:</p> <p>Performance Test Notification (written): due 30 days before each Performance Test</p> <p>Performance Test Plan: due 30 days before each Performance Test</p> <p>Performance Test Pre-test Meeting: due 7 days before each Performance Test</p> <p>Performance Test Report: due 45 days after each Performance Test</p> <p>Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p>	Minn. R. 7017.2030, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

**Subject Item: GP 002 Emergency Diesel Generators****Associated Items:** EU 007 Diesel Generator 1 ODG-GEN-001

EU 008 Diesel Generator 2 ODG-GEN-002

SV 007 Stack 7, Diesel Generator 1

SV 008 Stack 8, Diesel Generator 2

What to do	Why to do it
Operating Hours: less than or equal to 816 hours/year using 12-month Rolling Sum as a total for GP 002.	Title I Condition: To remain a nonmajor modification for NOx under 40 CFR Section 52.21.
Sulfur Content of Fuel: less than or equal to 0.05 percent by weight	40 CFR 72.7, New Unit Exemption, Acid Rain Program; meets requirement of Minn. R. 7011.2300 subp. 2
Opacity: less than or equal to 20 percent once operating temperatures are attained (applies individually to each emission unit or stack)	Minn. R. 7011.2300, subp. 1
The permittee shall obtain from the fuel supplier a certificate or other record indicating that the fuel delivered for use in the GP 002 emission units has a sulfur content less than or equal to 0.05 percent by weight on a 12-month annual average.	40 CFR 72.7, New Unit Exemption, Acid Rain Program, Minn. R. 7007.0800, subp. 4 and 5
Recordkeeping: For each day of operation of any GP 002 emission unit(s), record the operating start and stop times. By the 15th of each month, calculate and record the total combined GP 002 operating hours for the previous month, and for the previous 12-month period (12-month rolling sum).	Title I Condition: To remain a nonmajor modification for NOx under 40 CFR Section 52.21.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

**Subject Item: GP 003 Electric Generating Combustion Turbine Stack Vents****Associated Items:** SV 001 Stack 1, Gas Turbine 1

SV 002 Stack 2, Gas Turbine 2

SV 003 Stack 3, Gas Turbine 3

SV 004 Stack 4, Gas Turbine 4

SV 005 Stack 5, Gas Turbine 5

SV 006 Stack 6, Gas Turbine 6

What to do	Why to do it
Stack Height: greater than or equal to 32 feet from ground level. This requirement applies to each individual stack.	Title I Condition: State Implementation Plan for SO2
Stack Cross-Sectional Area: less than or equal to 150 square feet (7.5 x 20 feet). This requirement applies to each individual stack.	Title I Condition: State Implementation Plan for SO2
Air Flow Rate: greater than or equal to 1150000 actual cubic feet/minute for each individual stack exhaust. This limit represents the modeled exhaust flow rate from each stack vent at maximum peak load/peak SO2 emissions. It is not representative of the flow rates at lower loads.	Title I Condition: State Implementation Plan for SO2
Temperature: greater than or equal to 1050 degrees F for each individual stack exhaust. This limit represents the modeled exhaust temperature in each stack vent at maximum peak load/peak SO2 emissions. It is not representative of the exhaust temperature at lower loads.	Title I Condition: State Implementation Plan for SO2

## TABLE B: SUBMITTALS

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills  
Permit Number: 03700015 - 002

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

Permit Technical Advisor  
Permit Section  
Air Quality Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

Supervisor  
Compliance Determination Unit  
Air Quality Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak  
Air and Radiation Branch  
EPA Region V  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue NW (6204N)  
Washington, D.C. 20460

**TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Computer Dispersion Modeling Information	due 1,216 days after 07/25/2000 for NOx and PM-10.	Total Facility

**TABLE B: RECURRENT SUBMITTALS**

09/10/03

Facility Name: NSP dba Xcel Energy - Inver Hills

Permit Number: 03700015 - 002

What to send	When to send	Portion of Facility Affected
Quarterly Report	due 30 days after end of each calendar quarter starting 07/28/1992 The report shall contain the following: 1) The percent sulfur content by weight and the heating value of the fuel oil in million British Thermal Units per gallon; 2) Summary of any exceedances of the emission limitation, monthly fuel use limitation and the sulfur content limitation during the calendar quarter. The report shall provide an explanation of each exceedance which occurred or a statement stating that no exceedances occurred. The report shall also state if fuel oil was burned during the monitored quarter.	Total Facility
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 07/25/2000. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year starting 07/25/2000 (for the previous calendar year). The Certification shall be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

# APPENDIX MATERIAL

Facility Name: NSP - Inver Hills Generating Plant

Permit Number: 03700015-002

## New Unit Exemption

For more information, see instructions and refer to 40 CFR 72.7

This submission is New ☐ Revised ☒

### Step 1

Identify the new unit by plant name, State, ORIS Code (if assigned) and Unit ID#.

Inver Hills Generating Plant Plant Name	MN State	1913 ORIS Code	7 Unit ID#
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### Step 2

List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.

1.8 MWe	Mwe	MWe	MWe	Mwe	Total 1.8 MWe
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### Step 3

List all fuels currently burned or expected to be burned, by the unit and the percent sulfur content by weight of each.

Fuel (current)	Sulfur Content (current)	Fuel (expected)	Sulfur Content (expected)
Diesel fuel	0.05%	Diesel fuel	0.05%

### Step 4

Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.7(a).

January 1, 2000  
Special Provisions



## step 5

Read the special provisions.

- (1) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 72.7 shall (i) comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt under 40 CFR 72.7 and (ii) comply with the requirements of the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
- (2) For any period for which a unit is exempt under 40 CFR 72.7, the unit is not an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71 and is not eligible to be an opt-in source under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR parts 70 and 71.
- (3) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 72.7 shall retain at the source that includes the unit records demonstrating that the requirements of 40 CFR 72.7(a) are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. Such records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content, and the sulfur content of each sample taken. The owners or operators bear the burden of proof that the requirements of paragraph 40 CFR 72.7(a) are met.
- (4) On the earliest of the following dates, a unit exempt under 40 CFR 72.7(b), (c), or (e) shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71: (i) the date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe; (ii) the date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or (iii) January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)) or for nongaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)). Notwithstanding 40 CFR 72.30(b) and (c), the designated representative for a unit that loses its exemption under 40 CFR 72.7 shall submit a complete Acid Rain permit application on the later of January 1, 1998 or 60 days after the first date on which the unit is no longer exempt. For the purpose of applying monitoring requirements under 40 CFR 75, a unit that loses its exemption under 72.7 shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

# New Unit Exemption

For more information, see instructions and refer to 40 CFR 72.7

This submission is    New ☐    Revised ☒

## Step 1

Identify the new unit by plant name, State, ORIS Code (if assigned) and Unit ID#.

Inver Hills Generating Plant Plant Name	MN State	1913 ORIS Code	8 Unit ID#
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## Step 2

List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.

					Total
1.8 MWe	MWe	MWe	MWe	MWe	1.8 MWe

## Step 3

List all fuels currently burned or expected to be burned, by the unit and the percent sulfur content by weight of each.

Fuel (current)	Sulfur Content (current)	Fuel (expected)	Sulfur Content (expected)
Diesel fuel	0.05%	Diesel fuel	0.05%

## Step 4

Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.7(a).

**January 1, \_\_2000\_\_**  
**Special Provisions**

## step 5

Read the special provisions.

(1) The owners and operators and, to the extent applicable, the designated representative of a

unit exempt under 40 CFR 72.7 shall (i) comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt under 40 CFR 72.7 and (ii) comply with the requirements of the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.

(2) For any period for which a unit is exempt under 40 CFR 72.7, the unit is not an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71 and is not eligible to be an opt-in source under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR parts 70 and 71.

(3) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 72.7 shall retain at the source that includes the unit records demonstrating that the requirements of 40 CFR 72.7(a) are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. Such records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content, and the sulfur content of each sample taken. The owners or operators bear the burden of proof that the requirements of paragraph 40 CFR 72.7(a) are met.

(4) On the earliest of the following dates, a unit exempt under 40 CFR 72.7(b), (c), or (e) shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71: (i) the date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe; (ii) the date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or (iii) January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)) or for nongaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)). Notwithstanding 40 CFR 72.30(b) and (c), the designated representative for a unit that loses its exemption under 40 CFR 72.7 shall submit a complete Acid Rain permit application on the later of January 1, 1998 or 60 days after the first date on which the unit is no longer exempt. For the purpose of applying monitoring requirements under 40 CFR 75, a unit that loses its exemption under 72.7 shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**DRAFT AIR EMISSION PERMIT NO. 03700015-002**

This technical support document is for all the interested parties of the draft permit. The purpose of this document is to set forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

## **1. General Information**

### **1.1. Applicant and Stationary Source Location:**

Owner/Operator Address and Phone Number (list both if different)	Facility Address (SIC Code: 4911)
Northern States Power Company dba Xcel Energy 414 Nicollet Mall Minneapolis, Minnesota 55401-1993 John Chelstrom (612) 330-7682	3185 117th Street East  Inver Grove Heights Dakota County

### **1.2. Description Of The Facility**

The Inver Hills Generating Plant is a peak electrical generation facility with a capacity of 440 megawatts (MW). The facility is composed of six identical pre-NSPS General Electric natural gas or fuel oil-fired simple cycle combustion turbine/generator sets. Natural gas is the primary fuel, and fuel oil is used mostly during curtailment of natural gas (which is almost always a winter phenomena, unless a natural gas pipeline break occurs during non-winter months). The Permittee has indicated that historically the overall fuel usage for the turbines is 90% natural gas and 10% fuel oil.

Distillate and residual oil storage consists of three 10 million gallon above ground storage tanks. The turbines are not subject to title IV because they commenced operation before November 15, 1990, (§72.6(b)(1)). The facility also has two post-1990 Caterpillar emergency diesel-fired reciprocating internal combustion engines that are grid connected and therefore subject to Title IV. The Permittee has applied for a new unit exemption and has committed to limiting diesel fuel sulfur content to 0.05 % by weight.

### **1.3 Description of the Activities Allowed By This Permit Action**

No physical modifications or emission changes are authorized by this permitting action. Title V computer dispersion modeling requirements have been revised to reflect the current 2001 policy. Instead of submittal of a protocol and results, the permit now requires submittal of modeling information only.

In addition, this permitting action removes the GP 001 48 lb/hr/unit carbon monoxide (CO) emission increase limit while combusting natural gas and operating the inlet fogging system, the 99 tons per year (tpy) CO and nitrogen oxide (NO<sub>x</sub>) emission increase limits while operating the inlet fogging system, recordkeeping for increased CO and NO<sub>x</sub> emissions while operating the inlet fogging system, and optional stack testing while operating the inlet fogging system and combusting fuel oil. The basis for the removal of these requirements is:

- 1) the results of August 2000 NO<sub>x</sub> and CO testing while combusting natural gas showed a decrease in NO<sub>x</sub> and CO emissions with inlet fogging;
- 2) the 3800 hr/yr total fuel oil combustion hours limit for all 6 gas turbines while operating the inlet fogging system restricts the NO<sub>x</sub> emissions increase from inlet fogging to less than 100 tpy when combusting fuel oil; and,
- 3) the calculated unlimited potential CO emissions increase due to the inlet fogging system is less than 100 tpy when combusting fuel oil.

## 2. Regulatory and/or Statutory Basis

Summary Regulatory and/or Statutory Basis of the Emission or operational Limit

### Regulatory Overview of Units Affected by the Modification

Table 1. Regulatory Overview

EU, GRP, or SV #	Applicable Regulations	Comments
FC	Minn. R. 7007.0800, subp. 2	Computer Dispersion Modeling Information

## 3. Technical Information

Revision of Title V State-only Computer Dispersion Modeling Requirements: The Permittee requested updating of the title V modeling requirements from the submittal of a protocol and results, to the submittal of modeling information only. The Permittee conducted the SCREEN3 modeling exercise in part 2 of the EC-03 air permit application form. SCREEN3 predicts a total 24-hour NO<sub>x</sub> impact of 294.45 ug/m<sup>3</sup>, whereas the 24-hour NO<sub>x</sub> target level is 282 ug/m<sup>3</sup>. The nearest occupied property is at 580 meters, and the maximum NO<sub>x</sub> concentration occurs at 100 meters or less for each combustion turbine and both diesel RICE. In addition, the Permittee has indicated there is a physical bottleneck in the 24-hour electrical transformer capacity at the facility. If the 6 combustion turbines and the two diesel RICE generators operate for a 24-hour period, there is risk to overheating and damaging the main station transformers. Considering the very marginal exceedance of the NO<sub>x</sub> 24-hour target, the maximum predicted ambient concentration is at a distance that is much less than the nearest receptor, and the transformer bottleneck, no additional NO<sub>x</sub> modeling will be

required of the Permittee. All other EC-03 SCREEN3 prediction concentrations were less than the applicable target level.

The facility actual emissions of PM<sub>10</sub> and NO<sub>x</sub> are as follows:

Pollutant	Threshold for Information Submittal	2001 Actual Emissions
PM <sub>10</sub>	100 tpy	7.33 tons
NO <sub>x</sub>	1000 tpy	265.3 tons

Title V modeling information is usually due 1096 days (3 years) after permit issuance. The permit (03700015-001) was issued on July 25, 2000, which means the modeling information would be due July 25, 2003. However, the permit writer has extended the deadline by 120 days (as would be allowed under the administrative amendment procedures in Minn. R. 7007.1400), in order to avoid noncompliance with the information submittal deadline. Also, the Permittee submitted the application for this amendment on November 20, 2002, but the project was not picked up by the permit writer until April 16, 2003.

Title I SO<sub>2</sub> SIP Conditions: Several clarifications were made to some of the SO<sub>2</sub> SIP conditions in GP 001 and GP 003, without changing the meaning of the requirements. In GP 001, the following requirements were revised: Oil Fuel Usage (Fuel Oil Usage), Allowable Fuel Types, Fuel Usage, SO<sub>2</sub> Emission Rate. In GP 003, all four requirements were revised.

PER 001 Inlet Cooling Project: PER 001 authorized installation of inlet cooling (aka inlet fogging) on the 6 existing gas turbines at the facility. It was anticipated that inlet cooling would increase warm weather (92F) output by 11% from 55 MW to 61 MW per turbine. This anticipated 11% output was used in calculating potential emission increases from the inlet cooling project, along with AP-42 emission factors. Inlet cooling creates a debottleneck that is seasonal because evaporative cooling is not feasible at dew points at or below the freezing point of water, and therefore the inlet air coolers do not operate at air temperatures below approximately 60 degrees F.

PSD Applicability to Inlet Fogging Project: The Inlet Fogging project had the potential to increase emissions of NO<sub>x</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and CO at greater than the significant emissions increase levels in §52.21 (this was based on emission calculations using Oct 1996 AP-42 factors and an 11% fuel input increase). As a result, an air analysis was required by the Prevention of Significant Deterioration (PSD) permitting program for these four pollutants. The analysis showed that none of the ambient concentration increases due to anticipated emission increases from inlet cooling would exceed the applicable Class II significant impact levels (SILs). As a result, no PSD increment or additional impacts analysis was necessary.

PER 001 contained a 48 lb/hr/unit on natural gas CO limit for the emissions increase due to inlet cooling. This limit, which is greater than the calculated 8.2 lb/hr/unit on natural gas potential CO increase due to inlet cooling, allowed for the virtually

unknown affect of the inlet cooling on CO emissions, while still ensuring that the additional CO emissions would not cause ambient air concentrations above the CO 1-hr and 8-hr SILs. This 48 lb/hr/unit limit is equal to the potential SO<sub>2</sub> emission increase from each turbine, and is acceptable because SO<sub>2</sub> modeling at 48 lb/hr/unit shows an ambient 3-hour SO<sub>2</sub> increase of 13 ug/m<sup>3</sup> which is much less than the CO significance levels of 2000 ug/m<sup>3</sup> (1-hour) and 500 ug/m<sup>3</sup> (8-hour). Restrictions on the additional PM<sub>10</sub> due to inlet cooling operation were not necessary because the ambient concentration increases due to the additional PM<sub>10</sub> from fuel oil or natural gas combustion were well below the PM<sub>10</sub> 24-hr and annual SILs.

Best Available Control Technology (BACT) requirements did not apply to this project. As stated in a December 15, 1997, letter from Region 5 to the Wisconsin Department Natural Resources regarding inlet cooler installation on WEPCO combustion turbines, BACT does not apply because there is no physical change to the combustion turbines.

Environmental Review Applicability to Inlet Fogging Project: The Inlet Fogging project had a potential emissions increase of NO<sub>x</sub>, SO<sub>2</sub>, and CO of more than 100 tpy, which is the applicable trigger level for environmental review required by Minn. R. 404410.4300. To avoid environmental review, PER 001 contained NO<sub>x</sub> and CO emission increase limits of 99 tpy, and a 3800 hr-per-year-while-burning-fuel-oil-with-inlet-cooling limit to restrict additional SO<sub>2</sub> from inlet cooling to less than 100 tpy. (This 3800-hour limit collaterally restricts the inlet cooling emissions increase from oil combustion to 98.6 tpy for NO<sub>x</sub> 6.84 tpy for CO.)

PER 001 NO<sub>x</sub> and CO Testing with Inlet Cooling While Combusting Natural Gas: As required by PER 001, the Permittee conducted NO<sub>x</sub> and CO emissions testing while combusting natural gas in EU 001 with and without inlet fogging, in order to determine the affect on emissions due to the inlet fogging system. The testing, conducted in August 2000, showed a decrease in lb/hr emissions of CO and NO<sub>x</sub> when operating the inlet fogging system and combusting natural gas. Based on those test results, the Permittee submitted an application for a major permit amendment to eliminate the lb/hr CO limit (which applies only while combusting natural gas), eliminate recordkeeping for inlet cooling operating hours while combusting natural gas, and eliminate the requirement to calculate additional NO<sub>x</sub> and CO emissions from inlet cooling operation while combusting natural gas. No testing was required by PER 001 while combusting fuel oil, because natural gas is the primary fuel, and oil is only used during curtailment of natural gas, which is primarily a winter-time phenomena when inlet fogging is not used. PER 001 did provide for optional testing while combusting fuel oil for periodic monitoring.

Changes To Inlet Cooling-Related Permit Requirements PER 002: Due to the August 2000 test results demonstrating no CO or NO<sub>x</sub> emissions increase due to inlet fogging while combusting natural gas, and that the calculated limited potential CO and NO<sub>x</sub> emissions increases due to inlet fogging while combusting fuel oil are less than 100 tpy for these two pollutants, these changes can be made to the permit. In addition, PER 002 is revised by removing the following GP 001 requirement:

Minn. R. 7017.2020, subp. 1	<p>Performance Test to measure Nitrogen Oxides or Carbon Monoxide (Periodic Monitoring): Perform within thirty (30) days of the date on which the total combined inlet fogging operating hours equals <math>[0.6 * 198,000 / \text{average of previous CO or NO}_x \text{ emission increase test results in lb/hr}]</math>. One emission unit (EU 003, EU 004, EU 005, or EU 006) shall be tested for each year that this operating hour value is exceeded. A different unit shall be tested for each of those years.</p> <p>Calculate the hours by using the emission increase of the pollutant with the greatest increase.</p> <p>In subsequent years, the lbs/hr emission increase shall be the average of each previously approved test results.</p>
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Because there is no emission increase and therefore the denominator of the equation in the requirement is zero.

In addition, the requirement to calculate the monthly and 12-month NO<sub>x</sub> and CO emissions increase due to combusting fuel oil while operating the inlet fogging system, has also been removed. This change was appropriate because the 3800 hr/yr/6 units fuel oil combustion operating limit restricts CO to 6.84 tpy and NO<sub>x</sub> to 98.6 tpy (the CO emissions increase without the 3800 hr/yr limit would be 94.6 tpy from all six turbines at 8760 hr/yr @ 3.6 lb CO/hr/unit, which is a physical impossibility due to the meteorological restrictions of inlet cooling operation). Therefore, due to the 3800 hr/yr limit on fuel oil, NO<sub>x</sub> and CO emissions can not exceed the 100 tpy environmental review threshold, so recordkeeping for the CO and NO<sub>x</sub> emissions increase during fuel oil combustion while operating inlet fogging, is not necessary.

The following GP 001 requirement was revised by removing items 1 and 2:

Minn. R. 7007.0800, subp. 5	<p>Monthly calculate and record the following by the 15<sup>th</sup> day of each month following initial operation of any inlet fogger:</p> <ol style="list-style-type: none"> <li>1. The inlet fogging operating hours, while combusting natural gas, for the previous month and the 12-month rolling sum.</li> <li>2. The additional emissions of CO and NO<sub>x</sub> attributable to the inlet fogging operation for the previous month and the 12-month rolling sum. Use the initial stack test data from either EU 001 or EU 002 as the lb/hr emission basis for the calculation when combusting natural gas. When combusting fuel oil, use the optional initial stack test emissions data for NO<sub>x</sub> and CO while burning fuel oil OR 52.0 lbs/hr for NO<sub>x</sub> and 4.0 lbs/hr for CO.</li> <li>3. The inlet fogging operating hours while combusting fuel oil, for the previous month and the 12-month rolling sum.</li> </ol>
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Finally, the 99 tpy CO and NO<sub>x</sub> limits were removed, because the 3800 hr/yr/6 units burning fuel oil with inlet fogging limit also restricts CO and NO<sub>x</sub> to less than 100 tpy (6.84 tpy CO and 98.6 tpy NO<sub>x</sub>), and there is no CO and NO<sub>x</sub> emissions increase from burning natural gas while operating the inlet cooling system, as shown by the August 2000 testing.

Comments Received During Public Notice and EPA Review: No comments were received during the 30-day public notice or the EPA 45-day review period.

#### **4. Conclusion**

Based on the information provided by Northern States Power Company d/b/a Xcel Energy, the Minnesota Pollution Control Agency has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 03700015-002 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Marshall Cole, Betsy Randt, Jenny Reinertsen