

**AIR EMISSION PERMIT NO. 03700015- 001  
IS ISSUED TO**

Northern States Power Company  
NSP - Inver Hills Generating Plant  
3185 117th Street  
Inver Grove Heights, Dakota County, Minnesota 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
Major Amendment	December 29, 1999
Total Facility Operating Permit	February 12, 1996

This permit authorizes the Permittee to operate and modify 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<sup>1</sup>. 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 as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

<sup>1</sup>The Permittee is responsible for complying with Amendment Three to Finding and Order dated July 28, 1992. The permit contains Title I requirements from Amendment Three and proposes three alternative requirements to replace various requirements in Amendment Three. The three requirements are listed as **Alternative** requirements and are not effective until this permit and its conditions have been approved under the Title I State Implementation Plan (SIP) program by the U.S. Environmental Protection Agency (EPA).

**Permit Type:** Federal; PSD, Title V operating permit

**Issue Date:** July 25, 2000

**Expiration:** July 25, 2005

All Title I Conditions do not expire.

Amendments to Conditions labeled "Title I Condition: State Implementation Plan for Sulfur Dioxide (SO<sub>2</sub>)" are required to go through the Federal State Implementation Plan approval process before the change becomes effective.

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Richard J. Sandberg  
Manager  
Major Facilities Section  
Metro District

for Karen A. Studders, Commissioner  
Minnesota Pollution Control Agency

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**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, Major Facilities Section/Metro District 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. Certain requirements which have been determined not to apply are listed in Table A of this permit.

**FACILITY DESCRIPTION:**

The Inver Hills Generating Plant provides up to 440 Megawatts (MW) of peak electrical generation. The facility is on call to operate, as needed, any or all of six combustion turbine/generator sets fueled by natural gas or fuel oil. On-site distillate and residual oil storage consists of three 10 million gallon tanks. The facility also has two post 1990 emergency diesel engines that are grid connected and thus have applied for a new unit exemption committing to 0.05 wt% sulfur content fuel.

To accommodate every increasing summer peaking electrical demand, the facility is installing inlet air coolers at the inlet of each combustion turbine generator. The inlet air coolers are essentially large volume spray nozzles which add water to the inlet air stream. The water spray is then evaporated by the inlet air stream which in turn cools and carries the evaporated water vapor into the compressor side of the gas turbine. The additional mass flow attributed to the evaporated water and the increased compressibility of the cooled air, improves the mechanical and thus electrical output capability of the gas turbine. Since evaporative cooling is not feasible at dew points at or below the freezing point of water, the inlet air coolers will not operate at air temperatures below approximately 60 degrees Fahrenheit. The modification of adding inlet air cooling to each of the six gas turbines is being considered a seasonal debottlenecking of the facility's electrical output. Due to increased flow rate through the turbine inlet due to the inlet cooling, the fuel usage of each unit is also increased in order to maintain a constant air to fuel ratio. The increased fuel usage will potentially cause a significant net emissions increase in Nitrogen Oxides (NO<sub>x</sub>), when burning natural gas and NO<sub>x</sub>, SO<sub>2</sub>, and Particulate Matter less than 10 um in size (PM<sub>10</sub>) when burning fuel oil.

The facility is accepting operating hours limitations for the inlet cooling system to limit emissions increases to less than 100 tons per year of any one air pollutant. The limits are taken to avoid Minnesota Environmental Assessment Worksheet requirements and review.

In an attempt to reduce or eliminate the fuel oil sampling and analysis requirements and record keeping, the facility is accepting an alternative fuel oil sulfur limit of 0.5 percent by weight. By limiting the sulfur content of the fuel to 0.5 percent and maintaining the same monthly and annual fuel oil usage limit, a fuel oil supplier certification should provide adequate assurance of compliance with the Title I fuel oil sulfur limit and SO<sub>2</sub> emission limit.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/25/00

Facility Name: NSP - Inver Hills Generating Plant

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**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.**

<b>Subject Item: Total Facility</b>	
<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**

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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 SO2" requirement.	Title I Condition: State Implementation Plan for SO2
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**

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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

07/25/00

Facility Name: NSP - Inver Hills Generating Plant

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**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
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
Nitrogen Oxides: less than or equal to 99 tons/year using 12-month Rolling Sum Calculated as the product of any positive hourly emission rate change measured during the initial emissions tests and the total GP 001 inlet fogging operating hours.	Title I Condition: To keep ambient air impact from inlet air fogging system modification below Class II PSD significant levels; Minn. R. 7007.0500, subp. 5, avoid Environmental Review
Carbon Monoxide: less than or equal to 48 lbs/hour per emission unit, while operating at base load with inlet fogging in operation and combusting natural gas, the emission rate increase over the emission rate at base load without inlet fogging in operation and combusting natural gas.	Title I Condition: To keep ambient air impact from inlet air fogging system modification below Class II PSD significant levels; Minn. R. 7007.0500, subp. 5, avoid Environmental Review
Carbon Monoxide: less than or equal to 99 tons/year using 12-month Rolling Sum Calculated as the product of any positive hourly emission rate change measured during the initial emissions tests and the total GP 001 inlet fogging operating hours.	Minn. R. 7007.0500, subp. 5, avoid Environmental Review
Oil Fuel Usage: less than or equal to 9410000 gallons/month using 12-month Rolling Average	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 fuel types.	Title I Condition: State Implementation Plan for SO <sub>2</sub>
Allowable Fuel Types: Distillate and 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 using 12-month Rolling Sum. This limit is the maximum operating hours of all six units combined while operating inlet foggers and combusting fuel oil. The limit is based on the potential change in hourly SO <sub>2</sub> emissions between operation with and without inlet fogging operation.	Minn. R. 7007.0500, subp. 5, avoid Environmental Review
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

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<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: On a monthly basis the Permittee shall use daily fuel usage data to calculate monthly fuel use based on a 12-month rolling average.</p>	<p>Title I Condition: State Implementation Plan for SO2</p>
<p>SO2 Emission Rate: The Permittee shall calculate the SO2 emission rate from 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 fuel oil use and 12-month rolling averages. 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 fuel oil use and 12-month rolling averages. 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**

07/25/00

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<p>Daily record the following for each emission unit in GP001 whenever inlet fogging occurs:</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>Monthly calculate and record the following by the 15th 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 NOx attributable to 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 burning fuel oil, use the optional initial stack test emissions data for NOx and CO while burning fuel oil OR 52.0 lbs/hr for NOx 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>	Minn. R. 7007.0800, subp. 5
PERFORMANCE TESTING	hdr
<p>Performance Test: due 180 days after end of each calendar year following Permit Issuance 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>Initial Performance Test: due 180 days after Permit Issuance to measure Nitrogen Oxides and Carbon Monoxide. The tests shall be performed on EU 001 or EU 002 at base load with and without inlet fogging in operation, while combusting natural gas.</p>	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 \times 198,000 / \text{average of previous CO or NOx emission increase test results in lbs/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>	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**

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Facility Name: NSP - Inver Hills Generating Plant

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**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	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,
Recordkeeping: Whenever the emission unit(s) are operated, daily record the operating start and stop times. By the 15th of each month, calculate and record the total combined operating hours of the previous month.	Title I Condition: To remain a nonmajor modification for NOx under 40 CFR Section 52.21.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/25/00

Facility Name: NSP - Inver Hills Generating Plant

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**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 shall be greater than or equal to 32 feet from ground level. This limit applies to each individual stack.	Title I Condition: State Implementation Plan for SO2
Stack cross-sectional area shall be less than or equal to 150 square feet (7.5 x 20 feet). This limit applies to each individual stack.	Title I Condition: State Implementation Plan for SO2
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. Air Flow Rate: greater than or equal to 1150000 actual cubic feet/minute	Title I Condition: State Implementation Plan for SO2
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. Temperature: greater than or equal to 1050 degrees F	Title I Condition: State Implementation Plan for SO2

## TABLE B: SUBMITTALS

07/25/00

Facility Name: NSP - Inver Hills Generating Plant  
Permit Number: 03700015 - 001

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**

07/25/00

Facility Name: NSP - Inver Hills Generating Plant

Permit Number: 03700015 - 001

<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 Protocol	due 1,096 days after Permit Issuance for NO <sub>x</sub> and PM-10. This protocol will describe the proposed modeling methodology and input data in accordance with all requirements of 40 CFR pt. 51, Appendix W. The protocol shall be based on projected operating conditions under the next permit term.	Total Facility
Computer Dispersion Modeling Results	due 1,462 days after Permit Issuance. The results shall be submitted after the MPCA has reviewed and approved the modeling protocol.	Total Facility

**TABLE B: RECURRENT SUBMITTALS**

07/25/00

Facility Name: NSP - Inver Hills Generating Plant

Permit Number: 03700015 - 001

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
Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance (July 30th and January 30th). The first report covers January 1 - June 30. The second report covers July 1 - December 31.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (January 30th).	Total Facility

APPENDIX MATERIAL

Facility Name: NSP - Inver Hills Generating Plant

Permit Number: 03700015-001



# 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.

					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.

Content	Fuel (current)	Sulfur Content (current)	Fuel (expected)	Sulfur (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.

Content	Fuel (current)	Sulfur Content (current)	Fuel (expected)	Sulfur (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. 03700015-001**

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** *(Information will be obtained from permit application forms GI-01, GI-04, GI-05 parts 1&2, and GI-07)*

1.1. Applicant and Stationary Source Location:

Owner and Operator Address and Phone Number (list both if different)	Facility Address (SIC Code: 4911 )
Northern States Power Company  414 Nicollet Mall (RSQ-6)  Minneapolis, Minnesota 55401-1993	3185 117th Street  Inver Grove Heights  Dakota County

1.2. Description of the facility

The Inver Hills Generating Plant provides up to 440 Megawatts (MW) of peak electrical generation. The facility is on call to operate, as needed, any or all of six combustion turbine/generator sets fueled by natural gas or fuel oil. On-site distillate and residual oil storage consists of three 10 million gallon tanks. The facility also has two post 1990 emergency diesel engines that are grid connected and thus have applied for a new unit exemption committing to 0.05 wt% sulfur content fuel.

1.3 Description of any changes allowed with this permit issuance

To accommodate every increasing summer peaking electrical demand, the facility is installing inlet air coolers at the inlet of each combustion turbine generator. The inlet air coolers are essentially large volume spray nozzles which add water to the inlet air stream. The water spray is then evaporated by the inlet air stream which in turn cools and carries the evaporated water vapor into the compressor side of the gas turbine. The additional mass flow attributed to the evaporated water and the increased compressibility of the cooled air, improves the mechanical and thus electrical output capability of the gas turbine. Since evaporative cooling is not feasible at dew points at or below the freezing point of water, the inlet air coolers will not operate at air temperatures below approximately 60 degrees F. The modification of adding inlet air cooling to each of the six gas turbines is being considered a seasonal debottlenecking of the facility's electrical output. Due to increased flow rate through the turbine inlet due to the inlet cooling, the fuel usage of each unit is also increased in order to maintain a constant air to fuel

ratio. The increased fuel usage will potentially cause a significant net emissions increase in Nitrogen Oxides (NO<sub>x</sub>) and Carbon Monoxide (CO), when burning natural gas and NO<sub>x</sub>, Sulfur Dioxide (SO<sub>2</sub>), and Particulate Matter less than 10 um in size (PM<sub>10</sub>) when burning fuel oil.

The facility is accepting operating hours limitations for the inlet cooling system to limit emissions increases to less than 100 tons per year of any one air pollutant. The limits are taken to avoid Minnesota Environmental Assessment Worksheet requirements and review.

1.4 Description of all amendments issued since the issuance of the last total facility permit and to be included in the Part 70 Permit.

Permit Number and Issuance Date	Action Authorized
202S-93-I/O-1 July 27, 1993	Installation and operation of one 77 kw emergency diesel generator.
202S-90-OT-2 September 18, 1995	Change to duel fueled burners on each turbine unit. Originally fuel oil only, switch to fuel oil and natural gas. Considered Pollution Control Project.
03700015-007 March 5, 1996	Installation and operation of two 1825 kw emergency and peaking diesel generators.
03700015-009 March 19, 1998	Replace existing partitioned exhaust stacks with a new non partitioned stacks. No change to the total cross-sectional area of the stack and thus no alteration of the Administrative Order required. Also inserts fuel oil consumption limits and sulfur content limits to reflect the November 26, 1996 Administrative Order amendments.

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

*Note: Quantification of emissions by emission unit is discretionary. The author may choose to include only total facility emissions, include breakdown of emissions for the larger emission units, or include emissions for all emission units. Quantification of total facility emissions is required.*

EU #	SV#	Emission Unit Description	PM Tpy	PM <sub>10</sub> Tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> Tpy	CO tpy	VOC Tpy	Pb tpy	Single HAP** Tpy	All HAPs tpy
001	001	simple cycle turbine	266.4	266.4	2919	3049	507.8	68.8	0.24	1.5	9.61
002	002	simple cycle turbine	266.4	266.4	2919	3049	507.8	68.8	0.24	1.5	9.61
003	003	simple cycle turbine	266.4	266.4	2919	3049	507.8	68.8	0.24	1.5	9.61
004	004	simple cycle turbine	266.4	266.4	2919	3049	507.8	68.8	0.24	1.5	9.61
005	005	simple cycle turbine	266.4	266.4	2919	3049	507.8	68.8	0.24	1.5	9.61
006	006	simple cycle turbine	266.4	266.4	2919	3049	507.8	68.8	0.24	1.5	9.61
007	007	Emergency/peaking diesel generator	0.3	0.3	3.7	35.3	4.6	0.6	NA	NA	0.01
007	007	Emergency/peaking diesel generator	0.3	0.3	3.7	35.3	4.6	0.6	NA	NA	0.01

	PM Tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> Tpy	CO tpy	VOC tpy	Pb tpy	Single HAP** Tpy	All HAPs tpy
Total Facility Limited Potential Emissions*	1599	1599	17538	18365	3056	414	1.66	9.0	57.7
Total Facility Actual Emissions*	8.6	8.6	42.4	9.36	0.92	1.3	NA	NA	NA

\*These are the limited potential emissions from column 3 in GI-07 from Delta. They differ from those in the permit application sent by the company in that they have been verified and corrected as need be by Minnesota Pollution Control Agency (MPCA) staff. These are the potential emissions that would appear in a public notice.

\*\*Single HAP is Formaldehyde.

Table 2. Facility(TF) and Permit Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)	CO, NO <sub>x</sub> , SO <sub>2</sub> , PM <sub>10</sub>		
NAAR (list pollutant)			
Part 70 Permit Program (list pollutant)	CO, NO <sub>x</sub> , SO <sub>2</sub> , PM <sub>10</sub> , HAPs		

\* Refers to potential emissions that are less than those specified as major by 40 CFR 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

## 2. Regulatory and/or Statutory Basis

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

### Regulatory Overview of Facility

*The purpose of this table is to give a summary overview of the significant sources of emissions and the applicable regulations and standards(e.g., NESHAPs, NSPS, Title I conditions, special operating parameters) It is not designed for the discussion of specific limits or requirements, unless they are unusual and need some explanation, nor is it for the discussion of compliance demonstration requirements. This information is obtainable from the permit itself, this section is intended to provide users in the future with a quick picture of how the facility is being regulated and permitted..*

EU, GRP, or SV #	Applicable Regulations	Comments:
EU001 EU002 EU003 EU004 EU005 EU006	SIP for Twin cities sulfur dioxide Nonattainment area (Administrative Order dated 7/28/92 and three amendments – 3 <sup>rd</sup> and last amendment dated 11/26/96	Fuel oil sulfur content $\leq$ 0.64 percent by weight  Fuel oil usage $\leq$ 9.41 million gallons per month based on a 12-month rolling average.  SO <sub>2</sub> emission limit = 0.67 lbs/MMBtu
EU007 EU008	40 CFR 72.7	Fuel oil sulfur content $\leq$ 0.05 percent by weight
EU001	Minn. R. 7007.2300	Standards of Performance for Internal Combustion Engines:

EU002		SO <sub>2</sub> ≤ 0.5 lbs/MMBtu (AO limit overrides this limit for the gas turbines)
EU003		Opacity ≤ 20 percent once operating temp. is attained
EU004		
EU005		
EU006		
EU007		
EU008		

### 3. Technical Information

- PSD Applicability - Although the inlet cooling systems do not emit any are pollutants, they do potentially increase the capacity and thus emissions of the combustion turbines when the inlet cooling is in operation. Therefore, the installation of the inlet cooling systems is considered a debottlenecking of the facility at least during the seasonal operation of the inlet cooling. When a comparison of the facility's past actual emissions (which were fairly low) to the future potential emissions is made, the net emissions increase is above the PSD significance levels for NO<sub>x</sub>, SO<sub>2</sub>, CO and PM<sub>10</sub>.
- State EAW requirements - The state Environmental Quality Board (EQB) decided that even though the proposed project could increase the facility's potential electrical output by more than 25 MW. The increase would only occur during the summer operations and would not increase the output to a greater value than is already achievable during winter operations when peak output is attainable. Therefore the EQB has declined to request NSP to submit an EAW for this project. Furthermore, NSP is accepting an emission cap of 99 TPY for any potential increase in NO<sub>x</sub>, CO or SO<sub>2</sub> emissions attributable to the modification. Since this is a state only requirement, the 100 TPY threshold is being calculated on an actual emissions increase basis due directly to the modification and not the PSD past actual to future potential method. The actual emissions increase will be verified by initial stack testing on one unit with and without inlet cooling operation and tracking of inlet cooling operating hours.
- Ambient Air Modeling - The ambient air modeling analysis performed by NSP and reviewed by the MPCA, show the potential impact of the potential increase in emissions will be below the PSD significance levels. Therefore, no PSD increment or further impact analysis will be performed for this modification. Since the modification will not adversely affect the current exhaust parameters that were modeled for the SO<sub>2</sub> SIP modeling represented in the Administrative Order (AO) dated July 28, 1992 and all subsequent amendments, no modification to the AO is required at this time. (see January 13, 2000, letter from NSP and January 20, 2000, memo from OnSoon K. Berglund to Daren Zigich). Since potential ambient CO impacts were scaled from the SO<sub>2</sub> modeling and the impacts were shown to be much less than the CO significance levels, an hourly CO emission limit that is equivalent to the potential SO<sub>2</sub> emission increase is in the permit. This higher limit should account for the virtually unknown affect of the inlet cooling on the CO emissions from the turbine while also assuring the ambient impact will still be far below the significance levels.



#### **4. Conclusion**

Based on the information provided by Northern States Power, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 03700015-001 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: Daren K. Zigich, Jennifer Tschida

Attachment: PSD Application  
Letter and Memo specified in section 3