

**AIR EMISSION PERMIT NO. 05300015- 001
IS ISSUED TO**

Northern States Power Company

NSP - RIVERSIDE
3100 Marshall Street Northeast
Minneapolis, Hennepin County, Minnesota 554181826

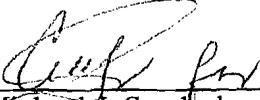
The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date
Total Facility Operating Permit	12/14/95
Major Amendment (Phase II Acid Rain NOx Requirements)	12/12/97

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. 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.

Permit Type: Federal ; Part 70 and Acid Rain	Modification
Issue Date: May 21, 1996	Issue Date: May 11, 1999
Expiration: May 21, 2001	

All Title I Conditions do not expire.



Michael J. Sandusky
Division Manager
Air Quality Division

for Karen A. Studders
Commissioner
Minnesota Pollution Control Agency

DZ:blt

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	(612)296-6300
Outside Metro Area	1-800-657-3864
TTY	(612)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. Certain requirements which have been determined not to apply are listed in Table A of this permit.

FACILITY DESCRIPTION:

The Permittee owns and operates a steam electric generating plant at 3100 Marshall street Northeast in Minneapolis, Minnesota. the sources discharging emissions to the atmosphere are 3 boilers designated as Boilers 6, 7, and 8, fuel/ash handling equipment and fugitive dust sources. Fuels for the boilers are coal, petroleum coke, natural gas, and oil. The plant has a net generating capacity of 360 MW.

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

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

Subject Item:	Total Facility

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

D. MONITORING REQUIREMENTS

Continuous Monitoring Equipment: Maintain 90 percent uptime based on quarterly reporting periods, for all SO₂, O₂ and Gas Flow continuous monitoring systems and associated equipment.

Exemptions from the 90 percent monitoring uptime requirement are:

1. lightning strikes, earthquakes, tornadoes, and other natural disasters;
2. time periods for return and repair of the CEMS to the manufacturer to replace needed parts not included in the manufacturer's list of recommended spare parts;
3. time periods for scheduled maintenance based on equipment manufacturer's recommended maintenance schedule and
4. time to conduct daily drift checks and required CEMS audits.

Title I Condition: State Implementation Plan for SO₂
This condition expires upon the effective date of EPA approval of the change from this current requirement to the 40 CFR 75 requirements (CEMS QA/QC)

E. RECORD KEEPING

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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 Sulfur Dioxide" requirement.

Title I Condition: State Implementation Plan for SO₂

F. REPORTING

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

<p>Deviations from requirements cited as "Title I Condition: State Implementation Plan for Sulfur Dioxide" shall be reported semi-annually with the Semiannual Deviations Report required by this permit. Reporting shall occur even if there were no deviations for this reporting period.</p>	<p>Title I Condition: State Implementation Plan for SO2</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

Subject Item: GP 001 Emergency Generators

Associated Items: EU 010 Emergency Engine Generator EEG - 61001

EU 011 Emergency Engine Generator EEG - 61002

What to do	Why to do it
Operating Hours: less than or equal to 816 hours/year using 12-month Rolling Sum calculated monthly.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
Calculate and record the monthly and the 12-month rolling sum operating hours for GP 001. Complete the calculation and recording by the end of each month, for the previous month and the previous 12-month period.	Title I Condition: recordkeeping to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

Subject Item: SV 001

Associated Items: EU 001 Boiler 6

EU 002 Boiler 7

EU 008 6/7 Fly Ash Bin

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 713 lbs/hour using 3-hour Average during scrubber operation.	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020
Sulfur Dioxide: less than or equal to 855 lbs/hour using 3-hour Average without scrubber operation	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020
B. MONITORING REQUIREMENTS	
State Implementation plan Emissions Monitoring: The owner or operator shall use the CEMs to measure SO2 emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.	Title I Condition: State Implementation Plan for SO2
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEM according to the QA/QC procedure in 40 CFR pt. 75, Appendix B as amended.	Title I Condition: State Implementation Plan for SO2 and 40 CFR Section 75.21
D. REPORTING	hdr
Excess Emissions/Downtime Reports (EER's): due 30 days after the end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedance of the limit for SO2 including exceedances allowed by the applicable standard, i.e. during startup, shutdown, and malfunctions.	Title I Condition: State Implementation Plan for SO2

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

Subject Item: SV 002

Associated Items: EU 001 Boiler 6

EU 002 Boiler 7

EU 008 6/7 Fly Ash Bin

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 713 lbs/hour using 3-hour Average during scrubber operation.	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020
Sulfur Dioxide: less than or equal to 855 lbs/hour using 3-hour Average without scrubber operation	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020
B. MONITORING REQUIREMENTS	
State Implementation plan Emissions Monitoring: The owner or operator shall use the CEMs to measure SO2 emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.	Title I Condition: State Implementation Plan for SO2
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEM according to the QA/QC procedure in 40 CFR pt. 75, Appendix B as amended.	Title I Condition: State Implementation Plan for SO2 and 40 CFR Section 75.21
D. REPORTING	hdr
Excess Emissions/Downtime Reports (EER's): due 30 days after the end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedance of the limit for SO2 including exceedances allowed by the applicable standard, i.e. during startup, shutdown, and malfunctions.	Title I Condition: State Implementation Plan for SO2

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

Subject Item: SV 003

Associated Items: EU 003 Boiler 8

EU 009 Unit 8 Fly Ash Bin

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 6150 lbs/hour using 3-hour Average	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020
B. MONITORING REQUIREMENTS	hdr
State Implementation plan Emissions Monitoring: The owner or operator shall use the CEMs to measure SO2 emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.	Title I Condition: State Implementation Plan for SO2
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEM according to the QA/QC procedure in 40 CFR pt. 75, Appendix B as amended.	Title I Condition: State Implementation Plan for SO2 and 40 CFR Section 75.21
D. REPORTING	hdr
Excess Emissions/Downtime Reports (EER's): due 30 days after the end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedance of the limit for SO2 including exceedances allowed by the applicable standard, i.e. during startup, shutdown, and malfunctions.	Title I Condition: State Implementation Plan for SO2

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

Subject Item: EU 001 Boiler 6

Associated Items: CE 001 Gas Scrubber (General, Not Classified)

CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 001

SV 002

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 0.83 lbs/million Btu heat input using 3-hour Average during scrubber operation	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 1.00 lbs/million Btu heat input using 3-hour Average without scrubber operation	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
B. OPERATIONAL REQUIREMENTS	
Allowed fuel types: coal, petroleum coke, distillate fuel oil, natural gas, petroleum derived used oil.	Title I Condition: State Implementation Plan for SO2

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TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

Subject Item: EU 002 Boiler 7

Associated Items: CE 001 Gas Scrubber (General, Not Classified)

CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 001

SV 002

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 0.83 lbs/million Btu heat input using 3-hour Average during scrubber operation	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 1.00 lbs/million Btu heat input using 3-hour Average without scrubber operation	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
B. OPERATIONAL REQUIREMENTS	
Allowed fuel types: coal, petroleum coke, distillate fuel oil, natural gas, and petroleum derived used oil.	Title I Condition: State Implementation Plan for SO2

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Facility Name: NSP - Riverside

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TABLE A: LIMITS AND OTHER REQUIREMENTS

05/11/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

Subject Item: EU 003 Boiler 8

Associated Items: CE 003 Electrostatic Precipitator - High Efficiency
 CE 004 Electrostatic Precipitator - High Efficiency
 CE 005 Electrostatic Precipitator - High Efficiency
 SV 003

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 2.7 lbs/million Btu heat input using 3-hour Average	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 2.5 lbs/million Btu heat input using 365-day Rolling Average	Title I Condition: State Implementation Plan for SO2 and Minn. R. 7009.0020 and Settlement Agreement with NSP, June 10, 1983, Docket No. PCA-83-003-AK
B. OPERATIONAL REQUIREMENTS	
Allowed fuel types: coal, petroleum coke, distillate fuel oil, natural gas, and petroleum derived used oil.	Title I Condition: State Implementation Plan for SO2

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/1/99

Facility Name: NSP - Riverside

Permit Number: 05300015 - 001

