

**AIR EMISSION PERMIT NO. 06100004- 001**  
**IS ISSUED TO**

Minnesota Power & Light  
The Wisconsin Public Power Inc. System

**MINNESOTA POWER AND LIGHT - BOSWELL ENERGY**  
P.O. Box 128  
Cohasset, Itasca County, Minnesota 55721-4763

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

Permit Type	Application Date
Total Facility Operating Permit	09/15/95

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 and with all general conditions listed in Minn. R. 7007.0800, subp. 16, [and all standard permit requirements listed in 40 CFR pt. 70.6\(a\)](#), which are incorporated by reference. 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 as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

**Permit Type:** Federal ; Part 70

**Issue Date:** March 24, 1997

**Expiration:**

All Title I Conditions do not expire.

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Michael J. Sandusky  
Acting Division Manager  
Air Quality Division

for Peder A. Larson  
Commissioner  
Minnesota Pollution Control Agency

BAB:lao

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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	(612)296-6300
Outside Metro Area	1-800-657-3864
TTY	(612)282-5332

The rule 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. Any requirements which have been determined not to apply are listed in Table A of this permit.

The permit shield, however does not apply to: Minn. R. ch. 7030 (Noise Pollution Control).

**FACILITY DESCRIPTION:**

The Boswell Energy Center (BEC) is an electric generating facility located adjacent to the Mississippi River in Cohasset, Minnesota. This electric power facility contains steam generating boilers, emergency generators, cooling towers, coal receiving, handling, and storage facilities, and ash handling and storage capabilities. The boilers are coal-fired and have a combined net generating capacity of approximately 1025 megawatts.

All operations and equipment within the facility boundary are established to: (1) provide electrical power for on-site and off-site utilization; (2) provide fuel for electrical power production or support activities; (3) monitor and control air pollutants generated from electrical power production; (4) handle waste energy, wastes, materials produced from the on-site operations; and (5) provide support activities. The description of these operations and equipment are described below.

**Power Generation**

Power generation occurs by steam generated from four boilers. Boilers No. 1 and 2 are wall-fired units, and Unit 3 is a tangential-fired unit, that discharge emissions to the atmosphere by a common 700-foot stack (Stack 3). Under emergency and testing conditions, Boilers 1 and 2 can also discharge to a separate 250-foot stack (Stack 1). Boiler No. 4 is a tangential-fired unit that discharges air emissions from a 600-foot stack (Stack 4).

Emergency electric power can be supplied to Units 1 through 4 by emergency generators. Units 1 and 2 are powered by a single Liquid Propane (L.P.) gas generator. Units 3 and 4 are powered by respective diesel generators.

**Fuel for Power Generation and Support Equipment/Activities**

The primary fuel for the boilers is subbituminous coal. This coal is received at BEC in unit train loads. BEC normally stores about 350,000 tons of coal on a clay-lined site, but can store up to 1.3 million tons. The facility is designed to handle the coal using numerous pieces of equipment and various handling and storage operations. The equipment and operations surrounding the use of coal are summarized below.

Coal is unloaded from rail cars and transferred to various facility locations to be either: (1) stored prior to crushing and being fed into the boilers; (2) crushed and immediately used by the boilers; (3) retained in the coal cars and transshipped to the Laskin Energy Center; or (4) transferred to trucks to send to other regional coal-using facilities. The coal handling equipment and operations are listed as follows:

- Rail unload building and associated totally enclosed conveyor systems;
- Railcar loadout facility lowering well including below ground level live bottom hoppers, belt feeders, and conveyor systems;
- Transfer towers and associated totally enclosed conveyor systems;
- Transfer house and associated totally enclosed conveyor systems;
- Storage silos and associated totally enclosed conveyor systems;
- Crusher houses and associated totally enclosed conveyor systems.

Coal storage occurs in outside storage areas or in storage silos. Since most of the coal handling and storage operations involve enclosed systems, air emissions from these activities are reduced. Nonetheless, these operations have particulate matter controls to remove the possibility of developing explosive conditions.

The fuels used for emergency power generation are liquid propane and diesel fuel (distillate fuel oil). Distillate fuel oil is also used for startup on Boilers 1 through 4. Boilers 1 through 4 can also combust petroleum-derived waste oils (generated within the Minnesota Power system), petroleum distillate solvents, oily sorbents, boiler cleaning agents (generated onsite), wastewater treatment plant sludge, and various oily materials.

### **Air Pollutant Monitoring and Control**

Air pollutants released from electrical power generation result primarily from the burning of coal. Combustion of propane and distillate fuel oil also release air pollutants, but at the BEC facility propane/fuel oil combustion pollutants are released in very minor quantities relative to coal combustion. Pollutants emitted at BEC are the criteria pollutants: Carbon Monoxide (CO), Sulfur Dioxide (SO<sub>2</sub>), Volatile Organic Compounds (VOC), Nitrogen Oxides (NO<sub>x</sub>), Particulate Matter (PM), Particulate Matter less than 10 um in size (PM<sub>10</sub>), and lead. Small quantities of Hazardous Air Pollutants (HAP) have the potential for release in the burning of coal.

All four units are equipped with Continuous Emission Monitoring (CEM) systems required by the Clean Air Act Amendments of 1990. The systems include monitors for SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>, volumetric flow, O<sub>2</sub> and opacity. A data acquisition system operates to collect and store emission data from all the CEMs.

The pollutants are controlled at BEC through a variety of methods. SO<sub>2</sub> is controlled by a SO<sub>2</sub> absorber. The SO<sub>2</sub> absorption (Boiler No. 4 only) is accomplished with the natural alkalinity of the ash from the western subbituminous coal or with lime. PM is controlled by fabric filters (baghouses) (Boilers 1 and 2), wet particulate scrubbers (Boilers 3 and 4), and an electrostatic precipitator (ESP) (Boiler 4). Control of PM surrounding coal handling and storage occurs through baghouses and vacuum cleaning. Boiler No. 4 operates with over-fire air to reduce NO<sub>x</sub> emissions. The Boiler No. 3 wet particulate scrubber also reduces SO<sub>2</sub> emissions. The pollution control equipment for all four units have demonstrated to be effective in reducing HAP emissions.

**Waste Heat, Wastes, and Materials**

Waste heat from electricity production is dissipated through the use of noncontact cooling towers (Boilers No. 3 and 4) and once through cooling water condensers (Boilers No. 1 and 2). Cooling water is drawn from the Mississippi River (Blackwater Lake) and discharged back into the Mississippi River. Some of the waste energy is used to heat the energy production-related buildings and a separate greenhouse. The cooling tower systems blow down is routed to an on-site wastewater treatment system.

Wastes are generated from the burning of fuels and in maintenance of equipment used in support of energy production activities. The burning of fuels produces ash. Some ash is sent to ash storage ponds within facility boundaries in a wet slurry form. Other quantities of dry ash from Boilers No. 1 and 2 are pneumatically conveyed within the facility to the Boiler No. 4 scrubber absorber tower for SO<sub>2</sub> emission abatement and then to the Boiler No. 4 scrubber sludge pond. Fly ash from Units 1 and 2 is also transported to Boiler No. 4 and directly injected to the boiler for additional control of fine particulate emissions. Waste generated from maintenance activities include oil and other waste materials from truck, front end loader, and other vehicle maintenance.

Additional material is generated in the handling, transporting, and pulverizing of coal. The handling, transport, and pulverizing of coal produces coal dust which is collected in air pollution control devices (baghouses), collected by a facility vacuum system, or washed to floor drains. The collected coal dust is returned to storage silos or appropriate conveyance equipment. Consequently, the collected material is recycled on-site except for what is released as fugitive emissions from the coal operations.

**Support Activities**

Support activities include building, conveyor and vehicle maintenance; general facility activities; energy production equipment maintenance; piping installation and maintenance; and ash-pond inspection and maintenance. These activities can include painting, welding, and cleaning operations. In terms of air emission regulations, these activities are considered insignificant activities for permitting purposes.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 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
What to do	Why to do it
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Comply with Fugitive Emissions Control Plan: Follow the actions and record keeping specified in the control plan. The plan may be amended with the Commissioner's approval. If the Commissioner determines that you are out of compliance with Minn. R. 7011.0150 or the control plan, then you may be required to amend the control plan and/or install and operate particulate matter ambient monitors.	Minn. R. 7007.0800, subp. 2
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)
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)
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, such as for system breakdowns, repairs, calibration checks, and zero and span adjustments (as applicable). Monitoring records should reflect any such periods of process shutdown.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	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)
<p>For all baghouse controlling emissions from solid fuel handling equipment:</p> <ol style="list-style-type: none"> <li>1. Inspect quarterly, or as required by manufacturing specifications, all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods. Maintain a written record of the inspection and any action resulting.</li> <li>2. Inspect monthly, or as required by manufacturing specifications, all components that are subject to wear or plugging. Maintain a written record of the inspection and any action resulting.</li> <li>3. Check visible emissions once every 48 hours. If visible emissions exist, inspect equipment for evidence of malfunction, including broken bags. Record the results of the inspection, and any corrective action taken.</li> </ol>	Minn. R. 7007.0800, subp. 2
Oily Floor Dry: Limit combustion to: 1) cellulose based only, 2) 25 tons per year, and 3) 1.25 tons per hour.	Title I Condition: to ensure that the emissions increase from the addition of the fuel type is less than significant as defined by 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2
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
Oral Notification of Deviations Endangering Human Health or the Environment: Within 24 hours of discovery, orally notify the Commissioner of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7007.0800, subp. 6(A)
Discovery of Deviation: due 2 days after Discovery of Deviation Discovery of Deviations Endangering Human Health or the Environment Report (written): due two working days after discovery of deviation, submit a written description of any deviation endangering human health or the environment to the Commissioner. Include the following information in this written description: cause of the deviation; exact dates of the period of the deviation; if the deviation has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7007.0800, subp. 6(A)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

Application for Permit Amendment: If you need a permit amendment, submit 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
Shutdowns: Notify the Commissioner at least 24 hours in advance of shutdown of any process or control equipment if the shutdown would cause an increase in the emission of air contaminants. At the time of notification, notify the Commissioner of the cause of the shutdown and the estimated duration. Notify the Commissioner again when the shutdown is over.	Minn. R. 7019.1000, subp. 1
Breakdowns: Notify the Commissioner immediately of a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emission of air contaminants. At the time of notification or as soon thereafter as possible, the permittee shall also notify the Commissioner of the cause of the breakdown and the estimated duration. Notify the Commissioner again when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Shutdown and Breakdown Reporting Requirement for the Dust Collector Systems for Material Handling Equipment: Shutdowns and breakdowns shall be reported on a quarterly basis to the Agency. The quarterly report shall include an identification of the dust collector that broke down or was shutdown, the time and reason for the breakdown or shutdown, a description of any repairs made, and the date and time the dust collector was placed back in service.	
Emission Fees: due 60 days after receipt of an MPCA bill	Minn. R. 7002.0005 through Minn. R. 7002.0095
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. The Permittee may require that MPCA inspectors be accompanied by MP staff during the inspection. Permittee's staff shall be available whenever the plant is operating.	Minn. R. 7007.0800, subp. 9(A)
Record keeping: 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 strip-chart 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)
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)
No emissions of acidic or alkaline substances in such amount that the downwind fall out rate at any place where an adverse effect could occur exceeds the upwind fall out rate by five or more spots per hour, measured in accordance with Minn R pt 7011.0405.	Minn. R. 7011.0400
Comply with 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 requirement only and is not federally enforceable.	Minn. R. 7030.0010-7030.0080
The following does not apply to Boilers No. 001, 002, 003, and 004. These units contain specific operating and/or production limits requirements..  Operating and/or production limits will be placed on emission units based on operating conditions during compliance testing. Limits set as a result of a compliance 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
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



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** GP 001 SV003 and SV004**Associated Items:** SV 003

SV 004

What to do	Why to do it
When EU 001 and EU 002 are not operating, sulfur dioxide emissions are limited to less than or equal to the following:  Condition 1) 3.52 lb/mmBtu for SV 003 and 1.2 lb/mmBtu for SV 004, both on a one-hour average; OR,  Condition 2) 4.0 lb/mmBtu for SV 003 and 0.88 lb/mmBtu for SV 004, both on a one-hour average; OR,  Condition 3) 3.67 lb/mmBtu for SV 003 and 1.10 lb/mmBtu for SV 004, both on a one-hour average.	Minn. R. ch. 7009; 40 CFR pt. 50
Individually measure and record the SO <sub>2</sub> emission rates in lb/MMBtu on a one-hour basis from SV 003 using the SO <sub>2</sub> CEM on SV 003, and from SV 004 using the SO <sub>2</sub> CEM on SV 004. The Permittee shall use the SO <sub>2</sub> CEMs data to determine compliance with the GP 001 sulfur dioxide emission limits.	Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** SV 003**Associated Items:** EU 001 Power Boiler 1

EU 002 Power Boiler 2

EU 003 Power Boiler 3

GP 001 SV003 and SV004

What to do	Why to do it
Sulfur Dioxide: less than or equal to 4.0 lbs/million BTU heat input using 1 Hour Average when EU 001 and EU 002 are not vented through SV 001. See requirements under EU 001, EU 002, and EU 003 for SO <sub>2</sub> emission limits that apply when EU 001 and EU 002 are vented through SV 001.	Minn. R. 7009.0020
The Permittee shall use data from the SO <sub>2</sub> CEM on SV003 to determine compliance with applicable SO <sub>2</sub> emission limits.	Minn. R. 7007.0800, subp. 2
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEMS according to the QA/QC procedures in 40 CFR pt. 75, appendix B as amended.	40 CFR Section 75.21
Daily Calibration Error (CE) Test: conduct daily CE testing on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, appendix B.	40 CFR pt. 75, Appendix B, section 2.1
Linearity and Leak Check Test (Acid Rain Program): due before end of each calendar quarter following CEM Certification Test in accordance with 40 CFR pt. 75. Conduct quarterly linearity test on all CEMS required by the Acid Rain Program in accordance with 40 CFR pt. 75, Appendix B.	40 CFR pt. 75, Appendix B, section 2.2
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar half-year following CEM Certification Test (or due each year, depending on the results of the previous test). Conduct RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, the next RATA is not required for twelve months.	40 CFR Section 75.4(b)
Recordkeeping: Maintain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source.	Minn. R. 7007.0800, subp. 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** SV 004**Associated Items:** EU 004 Power Boiler 4

GP 001 SV003 and SV004

What to do	Why to do it
Maintain SV 004 exit flue gas temperature at a minimum of 135 degrees F.	Minn. R. 7011.0400
Measure and record SV 004 exit flue gas temperature on an hourly basis. Maintain all records for at least five years from the date of recording.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEMS according to the QA/QC procedures in 40 CFR pt. 75, appendix B as amended.	40 CFR Section 75.21
Daily Calibration Error (CE) Test: conduct daily CE testing on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, appendix B.	40 CFR pt. 75, Appendix B, section 2.1
Linearity and Leak Check Test (Acid Rain Program): due before end of each calendar quarter following CEM Certification Test in accordance with 40 CFR pt. 75. Conduct quarterly linearity test on all CEMS required by the Acid Rain Program in accordance with 40 CFR pt. 75, Appendix B.	40 CFR pt. 75, Appendix B, section 2.2
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar half-year following CEM Certification Test (or due each year, depending on the results of the previous test). Conduct RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, the next RATA is not required for twelve months.	40 CFR Section 75.4(b)
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily. The COMS must be adjusted whenever the calibration drift (CD) exceeds the specification of PS-1 of 40 CFR 60, Appendix B.	Minn. R. 7017.1000; Minn. R. 7007.0800, subp. 2; 40 CFR Section 60.13(d)
COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all COMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to six-minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the six-minute averaging period.	Minn. R. 7007.0800, subp. 2
COMS Calibration Error Audit: due before end of each calendar half-year following COMS Certification Test. Conduct audits at least 3 months apart but no greater than 8 months apart.	Minn. R. 7007.0800, subp. 2
Calibrate, maintain, and operate continuous monitoring systems for measuring opacity, sulfur dioxide, and nitrogen oxides emissions, and either O <sub>2</sub> or CO <sub>2</sub> . The sulfur dioxide emission rate shall be calculated on an hourly basis, and the nitrogen oxides emission rate shall be calculated on a 30-day rolling average.	40 CFR Section 60.45(a)
Use the conversion procedures under 60.45(e) to convert the monitoring data into lb/mmBtu.	40 CFR Section 60.45
Recordkeeping: Keep on site at the source each of the following documents for a period of 5 years from the date of permit issuance: The certificate of representation, all emissions monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, copies of all documents used to complete an acid rain permit application.	40 CFR Section 72.9(f)(l)
Recordkeeping: The owner or operator must retain records of all COMS/CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source.	Minn. R. 7007.0800, subp. 5

# TABLE A: LIMITS AND OTHER REQUIREMENTS

03/24/97

Facility Name: Minnesota Power & Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** EU 001 Power Boiler 1

**Associated Items:** CE 001 Fabric Filter - High Temperature, i.e., T>250 Degrees F

MR 001

MR 002

MR 003

MR 004

MR 017

SV 001

SV 003

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.1 lbs/million BTU heat input	Title I condition: 40 CFR Section 52.21 PSD permit application and ambient air impacts analysis; ensures compliance with Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0510, subp. 2
Sulfur Dioxide: less than or equal to 4.0 lbs/million BTU heat input using 3 Hour Average period for solid fuels, and 2.0 lbs/mmBtu when burning liquid fuels. When solid and liquid fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula: $w = [2y + 4z] / (y + z)$ where y is the % heat input from liquid fossil fuel and z is the % heat from solid fuels. This limit applies only when EU001 is vented through SV003.	Minn. R. 7011.0510, subp. 1
When the EU 001 flue gasses are vented through SV 001: Sulfur Dioxide: less than or equal to 1.18 lbs/million BTU heat input using 1 Hour Average	Minn. R. 7009.0020
Comply with the applicable Acid Rain emissions limitation for sulfur dioxide. Takes effect for years beginning January 1, 2000.	40 CFR Section 72.9(c)(1)(ii), 40 CFR Section 72.9(g)(4)
Application for NOx limits: Submit a complete permit application and compliance plan for NOx emissions in accordance with 40 CFR Section 76.9.	40 CFR Section 76.9(b)(2)
Fuel use: limited to sub-bituminous coal, boiler cleaning agents, distillate oil, oily coal, used oil, and oily paper-based floor dry.	Minn. R. 7007.0800, subp. 2
Boiler cleaning agents limited to: EDTA type and Ammonium Bromate, are generated on-site, 5% of total mass input, oxygen limited to 3% or greater, agents may only be burned while the boiler is operating at 75 percent of rated capacity or greater.	Minn. R. 7007.0800, subp. 2
Burn off-specification and on-specification used oil in accordance with Minn. R. ch. 7045, not to exceed 17.5% of rated heat input on an hourly basis (equal to 963 gallons/hr.).	Minn. R. 7007.0800, subp. 2
The owner or operator shall measure opacity, and all SO2, NOx, and CO2 emissions for each affected unit in accordance with 40 CFR Section 75.10.	40 CFR Section 75.10
Vendor Certifications when emissions are vented through SV 001: For all coal burned in EU 001 when emissions are vented through SV 001, maintain coal vendor information on-site that documents coal sulfur content in percent by weight, and heat content in Btu per pound. Records shall be maintained for a minimum of five years and include calculations that convert heat and sulfur content data, to EU 001 SO2 emissions in lb/mmBtu. The calculated SO2 emission rate shall be used to determine compliance with the applicable SO2 emission limit.	Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 180 days after Permit Issuance to determine compliance with the Title I condition particulate matter emission limit.	Title I Condition: to demonstrate compliance with the particulate matter emission limit set under 40 CFR 52.21; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test	Minn. R. 7017.2030, subp. 4
Performance Test: due before end of each 60 months following Initial Performance Test to determine compliance with the Title I condition particulate matter emission limit. The tests shall be conducted at an interval not to exceed 60 months between test dates.	Title I Condition: to demonstrate compliance with the particulate matter emission limit set under 40 CFR 52.21; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before end of each 60 months following Initial Performance Test (7 days before each Performance Test)	Minn. R. 7017.2030, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

<p>Boiler Alternative Operating Conditions for Performance Testing:</p> <p>Alternative Operating Conditions during testing are defined as 90% to 100% of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, Subp. 2(A) and 3(B)
<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:</p> <p>(1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate.</p> <p>(2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, boiler operation will be limited to 110% of the tested operating rate.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, Subp. 3(B)
<p>STET (Short Term Emergency and Testing) Operating hours limit:</p> <p>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Maintain documentation of all STET operation to demonstrate compliance with this limit. The boiler must meet emission limits during STET operation.</p>	Minn. R. 7007.0800, Subp. 2.
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing:</p> <p>If performance test results demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test.</p> <p>If performance test results demonstrate compliance at greater than 80% any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, Subp. 2.
<p>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.</p>	Minn. R. 7017.2020, Subp. 4.
<p>The Permittee shall use data from the COM (Continuous Opacity Monitor) on EU 001 to determine compliance with the opacity limit in Minn. R. 7011.0510, subp. 2.</p>	Minn. R. 7007.0800, subp. 2
<p>COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to one-minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the one-minute averaging period.</p>	Minn. R. 7007.0800, subp. 2
<p>COMS Calibration Error Audit: due before end of each calendar half-year following COMS Certification Test. Conduct audits at least 3 months apart but no greater than 8 months apart.</p>	Minn. R. 7007.0800, subp. 2
<p>COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all COMS shall be in continuous operation.</p>	Minn. R. 7007.0800, subp. 2
<p>COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily. The COMS must be adjusted whenever the calibration drift (CD) exceeds the specification of PS-1 of 40 CFR 60, Appendix B.</p>	Minn. R. 7017.1000; Minn. R. 7007.0800, subp. 2
<p>Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source.</p>	Minn. R. 7007.0800, subp. 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

Recordkeeping: Keep on site at the source each of the following documents for a period of 5 years from the date the document is created: The certificate of representation, all emissions monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, copies of all documents used to complete an acid rain permit application.	40 CFR Section 72.9(f)(l)
Maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.	Minn. R. 7007.0800, subp. 5
Recordkeeping: maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.	Minn. R. 7007.0800, subp. 5
Apply for Acid Rain Program Permit reissuance: The designated representative or the alternate designated representative shall submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain Permit in accordance with 40 CFR Section 72.30(c).	40 CFR Section 72.30(c)
Certify Acid Rain Program submittals. Each submission under the Acid Rain Program shall be submitted, signed, and certified by the designated representative or the alternate designated representative for all sources on behalf of which the submission is made in accordance with 40 CFR Section 72.21.	40 CFR Section 72.21
Hold allowances as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year. Takes effect for years beginning January 1, 2000. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.	40 CFR Section 72.9(c)(1)(i), 40 CFR Section 72.9(g)(4)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** EU 002 Power Boiler 2**Associated Items:** CE 002 Fabric Filter - High Temperature, i.e., T>250 Degrees F

MR 009

MR 010

MR 011

MR 012

MR 018

SV 001

SV 003

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.1 lbs/million BTU heat input	Title I condition: 40 CFR Section 52.21 PSD permit application and ambient air impacts analysis; ensures compliance with Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0510, subp. 2
Sulfur Dioxide: less than or equal to 4.0 lbs/million BTU heat input using 3 Hour Average period for solid fuels, and 2.0 lbs/mmBtu when burning liquid fuels. When liquid and solid fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula: $w = [2y + 4z] / (y + z)$ where y is the % heat input from liquid fossil fuel and z is the % heat from solid fuels. This limit applies only when EU 002 is vented through SV 003.	Minn. R. 7011.0510, subp. 1
When EU 002 flue gasses are vented through SV 001: Sulfur Dioxide: less than or equal to 1.18 lbs/million BTU heat input using 1 Hour Average	Minn. R. 7009.0020
Comply with the applicable Acid Rain emissions limitation for sulfur dioxide. Takes effect for years beginning January 1, 2000.	40 CFR Section 72.9(c)(1)(ii), 40 CFR Section 72.9(g)(4)
Application for NOx limits: Submit a complete permit application and compliance plan for NOx emissions in accordance with 40 CFR Section 76.9.	40 CFR Section 76.9(b)(2)
Fuel use: limited to sub-bituminous coal, boiler cleaning agents, distillate oil, oily coal, used oil, and oily paper-based floor dry.	Minn. R. 7007.0800, subp. 2
Boiler cleaning agents limited to: EDTA type and Ammonium Bromate, are generated on-site, 5% of total mass input, oxygen limited to 3% or greater, agents may only be burned while the boiler is operating at 75 percent of rated capacity or greater.	Minn. R. 7007.0800, subp. 2
Burn off-specification and on-specification used oil in accordance with Minn. R. ch. 7045, not to exceed 17.5% of rated heat input on an hourly basis (equal to 963 gallons/hr.).	Minn. R. 7007.0800, subp. 2
The owner or operator shall measure opacity, and all SO <sub>2</sub> , NO <sub>x</sub> , and CO <sub>2</sub> emissions for each affected unit in accordance with 40 CFR Section 75.10.	40 CFR Section 75.10
Vendor Certifications when emissions are vented through SV 001: For all coal burned in EU 002 when emissions are vented through SV 001, maintain coal vendor information on-site that documents coal sulfur content in percent by weight, and heat content in Btu per pound. Records shall be maintained for a minimum of five years and include calculations that convert heat and sulfur content data, to EU 002 SO <sub>2</sub> emissions in lb/mmBtu. The calculated SO <sub>2</sub> emission rate shall be used to determine compliance with the applicable SO <sub>2</sub> emission limit.	Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 180 days after Permit Issuance to determine compliance with the Title I condition particulate matter emission limit.	Title I Condition: to demonstrate compliance with the particulate emission limit set under 40 CFR 52.21; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test	Minn. R. 7017.2030, subp. 4
Performance Test: due before end of each 60 months following Initial Performance Test to determine compliance with the Title I condition particulate matter emission limit. The tests shall be conducted at an interval not to exceed 60 months between test dates.	Title I Condition: to demonstrate compliance with the particulate emission limit set under 40 CFR 52.21; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before end of each 60 months following Initial Performance Test (7 days before each Performance Test)	Minn. R. 7017.2030, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

<p>Boiler Alternative Operating Conditions for Performance Testing:</p> <p>Alternative Operating Conditions during testing are defined as 90% to 100% of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, Subp. 2(A) and 3(B)
<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:</p> <p>(1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate.</p> <p>(2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, boiler operation will be limited to 110% of the tested operating rate.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, Subp. 3(B)
<p>STET (Short Term Emergency and Testing) Operating hours limit:</p> <p>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Maintain documentation of all STET operation to demonstrate compliance with this limit. The boiler must meet emission limits during STET operation.</p>	Minn. R. 7007.0800, Subp. 2.
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing:</p> <p>If performance test results demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test.</p> <p>If performance test results demonstrate compliance at greater than 80% any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, Subp. 2.
<p>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.</p>	Minn. R. 7017.2020, Subp. 4.
<p>The Permittee shall use data from the COM on EU 002 to determine compliance with the opacity limit in Minn. R. 7011.0510, subp. 2.</p>	Minn. R. 7007.0800, subp. 2
<p>COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to one-minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the one-minute averaging period.</p>	Minn. R. 7007.0800, subp. 2
<p>COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all COMS shall be in continuous operation.</p>	Minn. R. 7007.0800, subp. 2
<p>COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily. The COMS must be adjusted whenever the calibration drift (CD) exceeds the specification of PS-1 of 40 CFR 60, Appendix B.</p>	Minn. R. 7017.1000; Minn. R. 7007.0800, subp. 2
<p>COMS Calibration Error Audit: due before end of each calendar half-year following COMS Certification Test. Conduct audits at least 3 months apart but no greater than 8 months apart.</p>	Minn. R. 7007.0800, subp. 2
<p>Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source.</p>	Minn. R. 7007.0800, subp. 5



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

Recordkeeping: Keep on site at the source each of the following documents for a period of 5 years from the date the document is created: The certificate of representation, all emissions monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, copies of all documents used to complete an acid rain permit application.	40 CFR Section 72.9(f)(l)
Recordkeeping: maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.	Minn. R. 7007.0800, subp. 5
Maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.	Minn. R. 7007.0800, subp. 5
Apply for Acid Rain Program Permit reissuance: The designated representative or the alternate designated representative shall submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain Permit in accordance with 40 CFR Section 72.30(c).	40 CFR Section 72.30(c)
Certify Acid Rain Program submittals. Each submission under the Acid Rain Program shall be submitted, signed, and certified by the designated representative or the alternate designated representative for all sources on behalf of which the submission is made in accordance with 40 CFR Section 72.21.	40 CFR Section 72.21
Hold allowances as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year. Takes effect for years beginning January 1, 2000. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.	40 CFR Section 72.9(c)(1)(i), 40 CFR Section 72.9(g)(4)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** EU 003 Power Boiler 3**Associated Items:** CE 003 Alkaline Fly Ash Scrubbing

MR 014

MR 015

MR 016

MR 019

SV 003

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.6 lbs/million BTU heat input	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0510, subp. 2
Sulfur Dioxide: less than or equal to 4.0 lbs/million BTU heat input using 3 Hour Average period for solid fuels, and 2.0 lbs/mmBtu when burning liquid fuels. When solid and liquid fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula: $w = [2y + 4z] / (y + z)$ where y is the % heat input from liquid fossil fuel and z is the % heat from solid fuels. The EU003 sulfur dioxide limit applies regardless if EU001 and EU002 are operating. See GP001 for additional EU003 (SV003) SO <sub>2</sub> limits.	Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 2.97 lbs/million BTU heat input using 1 Hour Average when EU 001 and EU 002 are operating, and the EU 001 and EU 002 emissions are vented through SV 001.	Minn. R. 7009.0020
Comply with the applicable Acid Rain emissions limitation for sulfur dioxide. Takes effect for years beginning January 1, 2000.	40 CFR Section 72.9(c)(1)(ii), 40 CFR Section 72.9(g)(4)
Application for NO <sub>x</sub> limits: Submit a complete permit application and compliance plan for NO <sub>x</sub> emissions in accordance with 40 CFR Section 76.9.	40 CFR Section 76.9(b)(2)
Fuel use: limited to sub-bituminous coal, boiler cleaning agents, distillate oil, oily coal, used oil, wastewater treatment plant sludge, oily paper-based floor dry, and oily materials (includes mixtures of earth substrate (soil, rocks, sod, etc.) or man-made petroleum adsorption material and various petroleum derived fuels (hydraulic, transformer (less than 50 ppm PCB), crankcase or lubricating oils, diesel fuel, and crude oil)).  Note: the Permittee is prohibited from using oily materials or wastewater treatment plant sludge as fuel until the Permittee satisfactorily completes the performance testing requirements for these fuels under EU003.	Minn. R. 7007.0800, subp. 2
Boiler cleaning agents limited to: EDTA type and Ammonium Bromate, are generated on-site, 5% of total mass input, oxygen limited to 3% or greater, agents may only be burned while the boiler is operating at 75 percent of rated capacity or greater.	Minn. R. 7007.0800, subp. 2
Burn off-specification and on-specification used oil in accordance with Minn. R. ch. 7045, and not to exceed 2,456 gallons per hour.	Minn. R. 7007.0800, subp. 2
Measure all SO <sub>2</sub> , NO <sub>x</sub> , and CO <sub>2</sub> emissions for each affected unit in accordance with 40 CFR Section 75.10. EU 003 is exempt from the opacity monitoring requirement under 40 CFR Section 75.10 due to moisture in the flue gases. (See 40 CFR 75.14(b).)	40 CFR Section 75.10
Initial Performance Test: due 180 days after Permit Issuance to determine compliance with particulate matter emission limit in Minn. R. 7011.0510, subp. 1.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test	Minn. R. 7017.2030, subp. 4
Performance Test: due before end of each 60 months following Initial Performance Test to determine compliance with particulate matter emission limit in Minn. R. 7011.0510, subp. 1. The tests shall be conducted at an interval not to exceed 60 months between test dates.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before end of each 60 months following Initial Performance Test (7 days before each performance test)	Minn. R. 7017.2030, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

<p>Boiler Alternative Operating Conditions for Performance Testing:</p> <p>Alternative Operating Conditions during testing are defined as 90% to 100% of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, Subp. 2(A) and 3(B)
<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:</p> <p>(1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate.</p> <p>(2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, boiler operation will be limited to 110% of the tested operating rate.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, Subp. 3(B)
<p>STET (Short Term Emergency and Testing) Operating hours limit:</p> <p>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Maintain documentation of all STET operation to demonstrate compliance with this limit. The boiler must meet emission limits during STET operation.</p>	Minn. R. 7007.0800, Subp. 2.
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing:</p> <p>If performance test results demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test.</p> <p>If performance test results demonstrate compliance at greater than 80% any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, Subp. 2.
<p>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.</p>	Minn. R. 7017.2020, Subp. 4.
<p>Performance Test: due 30 days after Performance Test Notification (written) of intent to conduct a performance test while burning waste water sludge. The test shall be for determining compliance with the particulate matter emission limit in Minn. R. 7011.0510, subp. 1. The Permittee shall also concurrently measure CO emissions. Except for the purpose of conducting this performance test, the Permittee shall not use this material as a fuel until the Permittee receives notification from the agency that compliance was demonstrated during the Waste Water Sludge Performance Test.</p>	Minn. R. 7017.2020, subp. 1.
<p>Performance Test Pre-test Meeting: due 7 days before Performance Test (Waste Water Sludge Performance Test)</p>	Minn. R. 7017.2030, subp. 4
<p>Performance Test: due 30 days after Performance Test Notification (written) of intent to conduct a performance test while burning oily materials. The test shall be for determining compliance with the particulate matter emission limit in Minn. R. 7011.0510, subp. 1. The Permittee shall also concurrently measure CO emissions. Except for the purpose of conducting this performance test, the Permittee shall not use this material as a fuel until the Permittee receives notification from the agency that compliance was demonstrated during the Oily Materials Performance Test.</p>	Minn. R. 7017.2020, subp. 1.
<p>Performance Test Pre-test Meeting: due 7 days before Performance Test (Oily Materials Performance Test)</p>	Minn. R. 7017.2030, subp. 4.
<p>Opacity monitoring alternative - monitor the following operating parameters for CE 003: 1) prequench slurry flow; 2) prequench slurry pressure; 3) high pressure slurry flow; 4) high pressure slurry pressure. (See requirements under CE 003).</p>	Minn. R. 7007.0800, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

Recordkeeping: Keep on site at the source each of the following documents for a period of 5 years from the date the document is created: The certificate of representation, all emissions monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, copies of all documents used to complete an acid rain permit application.	40 CFR Section 72.9(f)(l)
Recordkeeping: maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.	Minn. R. 7007.0800, subp. 5
Maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.	Minn. R. 7007.0800, subp. 5
Apply for Acid Rain Program Permit reissuance: The designated representative or alternate designated representative shall submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain Permit in accordance with 40 CFR Section 72.30(c).	40 CFR Section 72.30(c)
Certify Acid Rain Program submittals. Each submission under the Acid Rain Program shall be submitted, signed, and certified by the designated representative or alternate designated representative for all sources on behalf of which the submission is made in accordance with 40 CFR Section 72.21.	40 CFR Section 72.21
Hold allowances as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year. Takes effect for years beginning January 1, 2000. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.	40 CFR Section 72.9(c)(1)(i), 40 CFR Section 72.9(g)(4)

# TABLE A: LIMITS AND OTHER REQUIREMENTS

03/24/97

Facility Name: Minnesota Power & Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** EU 004 Power Boiler 4

**Associated Items:** CE 004 Venturi Scrubber  
CE 005 Electrostatic Precipitator - High Efficiency  
CE 006 Spray Tower  
CE 011 Fly Ash Injection  
MR 005  
MR 006  
MR 007  
MR 008  
SV 004

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.1 lbs/million BTU heat input	Title I Condition: 40 CFR Section 52.21 PSD BACT limit and ambient impacts analysis; 40 CFR Section 60.42(a)(1)
Opacity: less than or equal to 20 percent opacity based on a six minute average, except for one six-minute average per hour not to exceed 27%	40 CFR Section 60.42(a)(2)
Sulfur Dioxide: less than or equal to 1.2 lbs/million BTU heat input using 1 Hour Average period for solid fossil fuel, and 0.8 lb/million BTU using 1 Hour Average period for liquid fossil fuel. When solid and liquid fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula: $w = [0.8y + 1.2z] / (y + z)$ where y is the % heat input from liquid fossil fuel and z is the % heat from solid fuels. See GP 001 for additional EU 004 (SV 004) SO <sub>2</sub> limits.	Title I Condition: 40 CFR Section 52.21 PSD BACT limit and ambient impacts analysis; 40 CFR Section 60.43
Sulfur Dioxide: less than or equal to 0.33 lbs/million BTU heat input based on an annual average.	Minn. R. 7021.0050, subp. 5
Comply with the applicable Acid Rain emissions limitation for sulfur dioxide. Takes effect for years beginning January 1, 2000.	40 CFR Section 72.9(c)(1)(ii), 40 CFR Section 72.9(g)(4)
Nitrogen Oxides: less than or equal to 0.7 lbs/million BTU heat input using 3 Hour Average for solid fossil fuels and less than 0.3 lb/mmBtu from liquid fossil fuels. When fossil fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula: $PS = [0.3y + 0.7z] / (y + z)$ where PS is the prorated NO <sub>x</sub> standard, y is the % heat input from liquid fossil fuels, and z is the % heat input from solid fossil fuels.	Title I Condition: 40 CFR Section 52.21 PSD BACT limit and ambient impacts analysis; 40 CFR Section 60.44
Application for NO <sub>x</sub> limits: Submit a complete permit application and compliance plan for NO <sub>x</sub> emissions in accordance with 40 CFR Section 76.9.	40 CFR Section 76.9(b)(2)
Fuel use: limited to sub-bituminous coal, boiler cleaning agents, distillate oil, oily coal, oily paper-based floor dry, and used oil.	Minn. R. 7007.0800, subp. 2
Boiler cleaning agents limited to: EDTA type and Ammonium Bromate, are generated on-site, 5% of total mass input, oxygen limited to 3% or greater, agents may only be burned while the boiler is operating at 75 percent of rated capacity or greater.	Minn. R. 7007.0800, subp. 2
Burn off-specification and on-specification used oil in accordance with Minn. R. ch. 7045, not to exceed 3824 gallons/hour (approximately 10 percent of rated capacity of 5,109 mmBtu/hour) on an hourly basis.	Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 180 days after Permit Issuance to determine compliance with particulate matter emission limit in 40 CFR Section 60.42(a)(1)/Title 1 condition PSD BACT particulate matter emission limit.	Title I Condition: to demonstrate compliance with the particulate limit set under 40 CFR Section 52.21; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test	Minn. R. 7017.2030, subp. 4
Performance Test: due before end of each 60 months following Initial Performance Test to determine compliance with the Title 1 condition particulate matter emission limit. The tests shall be conducted at an interval not to exceed 60 months between test dates.	Title I Condition: to demonstrate compliance with the particulate emission limit set under 40 CFR Section 52.21; Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before end of each 60 months following Initial Performance Test (7 days before each Performance Test)	Minn. R. 7017.2030, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

<p>Boiler Alternative Operating Conditions for Performance Testing:</p> <p>Alternative Operating Conditions during testing are defined as 90% to 100% of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, Subp. 2(A) and 3(B)
<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:</p> <p>(1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate.</p> <p>(2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, boiler operation will be limited to 110% of the tested operating rate.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7017.2025, Subp. 3(B)
<p>STET (Short Term Emergency and Testing) Operating hours limit:</p> <p>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Maintain documentation of all STET operation to demonstrate compliance with this limit. The boiler must meet emission limits during STET operation.</p>	Minn. R. 7007.0800, Subp. 2.
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing:</p> <p>If performance test results demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test.</p> <p>If performance test results demonstrate compliance at greater than 80% any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, Subp. 2.
<p>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.</p>	Minn. R. 7017.2020, Subp. 4.
<p>Notification that Continuous Opacity Monitoring System (COMS) data will be used to determine compliance with opacity standard during Performance Test: due 30 days before Performance Test</p>	40 CFR Section 60.7(a)(7)
<p>The Permittee shall use the COM on SV 004 to determine compliance with the opacity limit in 40 CFR Section 60.42(a)(2).</p>	Minn. R. 7007.0800, subp. 2
<p>The Permittee shall use the NOx and SO2 CEMS on SV 004 to determine compliance with the EU 004 NOx and SO2 emissions limits.</p>	Minn. R. 7007.0800, subp. 2
<p>Recordkeeping: Keep on site at the source each of the following documents for a period of 5 years from the date the document is created: The certificate of representation, all emissions monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, copies of all documents used to complete an acid rain permit application.</p>	40 CFR Section 72.9(f)(I)
<p>Recordkeeping: maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.</p>	40 CFR Section 60.7(b)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

Maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least five years following the date of such measurements, maintenance, reports, and records.	40 CFR Section 60.7(f); Minn. R. 7007.0800, subp. 5
Apply for Acid Rain Program Permit reissuance: The designated representative or alternate designated representative shall submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain Permit in accordance with 40 CFR Section 72.30(c).	40 CFR Section 72.30(c)
The owner or operator shall measure opacity, and all SO <sub>2</sub> , NO <sub>x</sub> , and CO <sub>2</sub> emissions for each affected unit in accordance with 40 CFR Section 75.10.	40 CFR Section 75.10
Certify Acid Rain Program submittals. Each submission under the Acid Rain Program shall be submitted, signed, and certified by the designated representative or the alternate designated representative for all sources on behalf of which the submission is made in accordance with 40 CFR Section 72.21.	40 CFR Section 72.21
Hold allowances as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year. Takes effect for years beginning January 1, 2000. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.	40 CFR Section 72.9(c)(1)(i), 40 CFR Section 72.9(g)(4)
Submit the calculations and annual average emission rate of sulfur dioxide along with the annual compliance certification (see total facility requirements)	Minn. R. 7021.0050

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power & Light - Boswell Energy  
Permit Number: 06100004 - 001

**Subject Item:** EU 007 LP Gas Emerg. Generator 1

**Associated Items:** SV 007

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity for more than 10 consecutive seconds once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power & Light - Boswell Energy  
Permit Number: 06100004 - 001

**Subject Item:** EU 009 Diesel Emergency Generator 3

**Associated Items:** SV 009

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity for more than 10 consecutive seconds once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/24/97

Facility Name: Minnesota Power & Light - Boswell Energy  
Permit Number: 06100004 - 001

Subject Item: EU 010 Diesel Emergency Generator 4

Associated Items: SV 010

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity for more than 10 consecutive seconds once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** EU 011 Coal Handling-Crusher Building**Associated Items:** CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
SV 011

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot if not required to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735	Minn. R. 7011.0715, subp. 1.A.
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1.B
Operate fabric filter when emissions from the equipment are vented to the atmosphere.	Minn. Stat. Section 116.07, subd. 4(a); Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** EU 012 Coal Handling-Crusher & Sampler House**Associated Items:** CE 008 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
SV 012

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot if not required to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735	Minn. R. 7011.0715, subp. 1.A.
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1.B
Operate fabric filter when emissions from the equipment are vented to the atmosphere.	Minn. Stat. Section 116.07, subd. 4(a); Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** EU 013 Fly Ash-#1&2 Storage Silo**Associated Items:** CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
SV 013

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot if not required to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735	Minn. R. 7011.0715, subp. 1.A.
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1.B.
Operate fabric filter when emissions from the equipment are vented to the atmosphere.	Minn. Stat. Section 116.07, subd. 4(a); Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** EU 014 Fly Ash-#1&2 Ash Hoppers**Associated Items:** CE 010 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
SV 014

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot if not required to comply with the less stringent limit of either Minn. R. pt. 7011.0730 or Minn. R. pt. 7011.0735	Minn. R. 7011.0715, subp. 1.A.
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1.B.
Operate fabric filter when emissions from the equipment are vented to the atmosphere.	Minn. Stat. Section 116.07, subd. 4(a); Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** CE 003 Alkaline Fly Ash Scrubbing**Associated Items:** EU 003 Power Boiler 3

What to do	Why to do it
Opacity monitoring alternative - monitor the following operating parameters for CE003: 1)prequench slurry flow; 2)prequench slurry pressure; 3)high pressure slurry flow; 4)high pressure slurry pressure.	Minn. R. 7007.0800, subp. 4
Operate CE003 wet scrubber in accordance with the following operating parameters, in order to determine compliance with the opacity limit under Minn. R. 7011.0510, subp. 2: a. Prequench slurry flow >4592 gpm Prequench slurry pressure >32 psig b. High pressure slurry flow >4536 gpm High pressure slurry pressure >158 psig	Minn. R. 7007.0800, subp. 2
Record once each hour of operation of EU003 for CE003: 1)prequench slurry flow rate; 2)prequench slurry pressure; 3)high pressure slurry flow rate; 4)high pressure slurry pressure.	Minn. R. 7007.0800, subp. 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** CE 004 Venturi Scrubber**Associated Items:** EU 004 Power Boiler 4

What to do	Why to do it
A minimum of one venturi slurry pump for each particulate scrubber module shall be operated at all times during the operation of EU004.	Title 1 Condition: To ensure compliance with the particulate matter emission limit set under 40 CFR Section 52.21 and 40 CFR Section 60.42(a)(1)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

**Subject Item:** CE 005 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 004 Power Boiler 4

What to do	Why to do it
<p>When bypass reheat is required to maintain compliance with the minimum flue gas exit temperature specified under SV004 in this permit, a portion of the total flue gas from EU004 may bypass the particulate matter emissions scrubber (CE004) and sulfur dioxide absorber (CE006), and be treated by a minimum of one unit of CE005 (electrostatic precipitator). When required to operate, CE005 shall not be operated with more than three of the bus-sections de-energized.</p> <p>When bypass reheat is not required to maintain compliance with the minimum flue gas exit temperature, all of the EU004 flue gas shall be treated by the particulate matter emissions scrubber (CE004) and sulfur dioxide absorber (CE006). After closing the inlet and outlet dampers to CE005, the Permittee may de-energize CE005.</p>	<p>Title 1 Condition: To ensure compliance with the particulate matter emission limit set under 40 CFR Section 52.21 and 40 CFR Section 60.42(a)(1)</p>

## TABLE B: SUBMITTALS

03/24/97

Facility Name: Minnesota Power & Light - Boswell Energy

Permit Number: 06100004 - 001

Table B lists the submittals you must send to the Commissioner. Table B is divided into two sections, for source-specific submittal requirements and for submittals required of all permittees. Source-specific submittals are further organized as either one-time only or recurrent requirements. You may also be subject to additional reporting requirements contained in the compliance schedule located in Table C of this permit. All submittals must be postmarked or received by the date specified in the table, and certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on standardized forms approved by the Commissioner are noted in Tables B and C.

Send any application for a permit or permit amendment to: Permit Information Coordinator, Permit Section, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4914. Also send the Permit Information Coordinator notices of: accumulated insignificant activities, installation of control equipment, replacement of an emissions unit, and changes that contravene a permit term.

Send all other submittals to: Compliance Tracking Coordinator, Compliance Determination Unit, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

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

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

What to send	When to send	Portion of Facility Affected
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 . Dispersion modeling is required for PM10, SO2 and NOx if potential emissions from the facility are in excess of 100 tons per year. The protocol will describe the proposed modeling methodology and input data in accordance with all requirements of 40 CFR pt. 51, App. W. The protocol may be based on proposed operating conditions under the next permit term if necessary.	Total Facility
Computer Dispersion Modeling Results	due 1,462 days after Permit Issuance	Total Facility
Fugitive Control Plan	due 60 days after Permit Issuance . The plan shall identify all fugitive emission sources, primary and contingent control measures, and the records to be kept to demonstrate that the plan is implemented.	Total Facility
Performance Test Notification (written)	due 30 days before Initial Performance Test	EU001, EU002, EU003, EU004
Performance Test Notification (written)	due 30 days before Performance Test (Oily Materials Performance Test)	EU003
Performance Test Notification (written)	due 30 days before Performance Test (Waste Water Sludge Performance Test)	EU003
Performance Test Plan	due 30 days before Initial Performance Test	EU001, EU002, EU003, EU004
Performance Test Plan	due 30 days before Performance Test (Oily Materials Performance Test)	EU003
Performance Test Plan	due 30 days before Performance Test (Waste Water Sludge Performance Test)	EU003
Performance Test Report - Microfiche Copy	due 105 days after Initial Performance Test	EU001, EU002, EU003, EU004
Performance Test Report - Microfiche Copy	due 105 days after Performance Test (Oily Materials Performance Test)	EU003
Performance Test Report - Microfiche Copy	due 105 days after Performance Test (Waste Water Sludge Performance Test)	EU003
Performance Test Report	due 45 days after Initial Performance Test	EU001, EU002, EU003, EU004
Performance Test Report	due 45 days after Performance Test (Oily Materials Performance Test)	EU003
Performance Test Report	due 45 days after Performance Test (Waste Water Sludge Performance Test)	EU003
Relative Accuracy Test Audit (RATA) Notification	due 30 days before CEMS Relative Accuracy Test Audit (RATA) .	SV003, SV004

**TABLE B: RECURRENT SUBMITTALS**

03/24/97

Facility Name: Minnesota Power &amp; Light - Boswell Energy

Permit Number: 06100004 - 001

What to send	When to send	Portion of Facility Affected
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	EU001, EU002, SV003, SV004
Linearity Test Results Summary	due 30 days after end of each calendar quarter following Linearity and Leak Check Test (Acid Rain Program) if performed.	SV003, SV004
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) .	SV003, SV004
COMS Calibration Error Audit Results Summary	due 30 days after end of each calendar half-year following COMS Calibration Error Audit .	EU001, EU002, SV004
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance	Total Facility
Compliance Certification Report (Acid Rain Program)	due 60 days after end of each calendar year starting 01/01/00 an annual compliance certification report for the unit in accordance with 40 CFR Section 72.90(a). The report shall include all information required by 40 CFR Section 72.90(b) and (c).	EU001, EU002, EU003, EU004
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance	Total Facility
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	Total Facility
Performance Test Notification (written)	due 30 days before end of each 60 months following Initial Performance Test (30 days before each Performance Test)	EU001, EU002, EU003, EU004
Performance Test Plan	due 30 days before end of each 60 months following Initial Performance Test (30 days before each Performance Test)	EU001, EU002, EU003, EU004
Performance Test Report - Microfiche Copy	due 105 days after end of each 60 months following Initial Performance Test (105 days after each Performance Test)	EU001, EU002, EU003, EU004
Performance Test Report	due 45 days after end of each 60 months following Initial Performance Test (45 days after each Performance Test)	EU001
Performance Test Report	due 45 days after end of each 60 months following Initial Performance Test (45 days after each Performance Test)	EU002
Performance Test Report	due 45 days after end of each 60 months following Initial Performance Test (45 days after each Performance Test)	EU003
Performance Test Report	due 45 days after end of each 60 months following Initial Performance Test (45 days after each Performance Test)	EU004

March 27, 1997

Mr. Robert E. Lindholm  
Environmental Principal  
Minnesota Power  
30 West Superior Street  
Duluth, Minnesota 55802

RE: Final Title V Air Emission Permit No. 06100004-001, for the Boswell Energy Center

Dear Mr. Lindholm:

The enclosed Air Emission Permit No. 06100004-001, authorizes operation of your facility located at Southwest County Road 6 and Highway 2, Cohasset, Itasca County, Minnesota.

The amendment is effective from the issuance date of the amendment until the expiration date of the permit. Please read through the permit and review its conditions and requirements. Distribute the permit to staff members responsible for ensuring compliance with the conditions and limitations in the permit. If appropriate, post the permit at the facility.

I have also enclosed the Operator's Summary you requested. It is **not** part of your permit. It contains all of the requirements found in Table A of your permit without the citations.

We appreciate your cooperation and compliance with environmental laws. It has been a pleasure working with you on this permit. If you have questions about the permit, please contact me at (218) 723-4837.

Sincerely,

Brett A. Ballavance, P.E.  
Air Quality Engineer

BAB:lao

Enclosure

cc: Bob Beresford, Duluth Regional Office  
AQD File No. 73B