IOWA DEPARTMENT OF NATURAL RESOURCES
CONSENT ORDER

IN THE MATTER OF:	ADMINISTRATIVE CONSENT ORDER NO. 89-AQ-04
Interstate Power Company	

I. SUMMARY

This consent order, which is entered into by Interstate Power Company (hereinafter "Interstate") and the Department of Natural Resources (hereinafter the "Department"), pertains to the reduction of emissions of sulfur dioxide (SO_2) from boilers #1 and #2 at the Clinton, Iowa generating station.

II. JURISDICTION

This order is issued pursuant to Iowa Code section 455B.134(9) which authorizes the Director to issue any order necessary to prevent, abate or control air pollution.

III. STATEMENT OF FACTS

1. Interstate owns and operates an electric power generating station in Clinton, Iowa. This station contains two coal fired boilers.

2. Coal fired boiler #1 was installed in 1947 and was modified in 1974 to include an electrostatic precipitator as pollution control (Permit No. 74-A-117). This boiler unit includes a stack which is 210 feet tall.

3. Coal fired boiler #2 was installed in 1967 and was modified to include, as pollution control, a replacement electrostatic precipitator in 1978 (Permit No. 78-A-157). This boiler unit includes a 245 foot tall stack.

4. The Clinton County area, in which the Interstate generating station is located, is a designated attainment area for the criteria air contaminant sulfur dioxide.

5. The coal fired boilers #1 and #2 and associated pollution control constitute existing solid fuel-burning units located in Clinton County and are subject to the SO_2 emission limit specified in 567--23.3(3)"a"(1) (IAC) (6 lbs/million BTU).

6. The Department has determined that at current emission rates the SO_2 emissions from boilers #1 and #2 will not assure the attainment and maintenance of the SO_2 ambient air quality standard in the area of the station.

7. The Department, therefore, modifies the permits issued to Interstate, specifically, permits No. 74-A-117 and 78-A-157, to reduce the SO_2 emission limits for boilers #1 and #2 which are incorporated herein in their entirety.

IV. CONCLUSIONS OF LAW

1. The Clinton area, in which Interstate is located, has been designated an attainment area for SO_2.

2. The boilers #1 and #2 operated by Interstate are "air contaminant sources" as defined by Iowa Code section 455B.131(2) and "stationary sources" as defined by rule 567--20.2 (455B) Iowa Administrative Code (IAC).

3. Pursuant to rule 567--28.1 (IAC) (455B), the state of Iowa ambient air quality standards are the National Primary and Secondary Ambient Air Quality Standards (NAAQS), 40 CFR Part 50 as amended through July 1, 1987.

4. An exceedance of the primary or secondary NAAQS for SO_2 constitutes "air pollution" as defined by Iowa Code section 455B.131(3).

5. In accordance with Iowa Code section 455B.134(9), the Director shall issue orders consistent with the rules to cause the abatement or control of air pollution.

6. The Director has considered the facts and circumstances bearing upon the reasonableness of Interstate's SO_2 emissions including the character and degree of injury to, or interference with, the protection of health and the physical property of the public and the practicability of reducing or limiting its SO_2 emissions.

7. Based upon these facts and circumstances, the Director has determined and Interstate agrees that the reduction of these SO_2 emissions to a level at which the SO_2 NAAQS will not be exceeded is practicable.

V. ORDER

THEREFORE, the Department ORDERS and Interestate AGREES to do the following:

1. Beginning May 1, 1990, Interstate shall burn only natural gas in Unit #1. From the effective date of this Consent Order to the date natural gas is required to be burned Interstate shall operate Unit #1 on coal only when Unit #2 is not operating.

2. Interstate shall install continuous emission monitoring equipment for sulfur dioxide on Unit #2 which complies with 40 CFR, Part 60, Appendix B, Specifications 2 and 3. The installation shall be completed by June 1, 1990 and a certification report shall be submitted to the Department by July 15, 1990.

3. Interstate shall report by July 1, 1990, its determination of whether gas conditioning to maintain precipitator efficiency is necessary in Unit #2. This report shall include data to support a determination of whether or not gas conditioning is necessary.

4. If it is determined that gas conditioning is not necessary in Unit #2, compliance with permit emission limit of 4.3 pounds per million Btu of heat input shall be achieved no later than July 1, 1990.

5. If it is determined that gas conditioning is necessary in Unit #2, compliance with permit emission limit of 4.3 pounds per million Btu of heat input shall be achieved no later than February 1, 1991.

6. Interstate shall comply with permits 74-A-117-S and 78-A-157-S, which are attached to this Order and are incorporated herein as a part of this Order.

WAIVER OF APPEAL RIGHTS

This order is entered into knowingly and with the consent of Interstate. For this reason, Interstate waives its right to appeal this order.

NONCOMPLIANCE

This order is binding upon Interstate and is enforceable as an order of the Department in accordance with Iowa Code section 455B.146. Failure to comply may result in the imposition of administrative penalties or referral to the Attorney General to obtain injunctive relief and civil penalties.

Any questions regarding this consent order may be directed to:

Mark Landa
Legal Services
Iowa Department of Natural Resources
Henry A. Wallace Building
900 East Grand Avenue
Des Moines, Iowa 50319-0034
515/281-6243

Larry J. Wilson — 2/21/90

LARRY J. WILSON, DIRECTOR
DEPARTMENT OF NATURAL RESOURCES — DATE

E. D. Frederick — 2/13/90

for INTERSTATE POWER COMPANY — DATE

A:ML-350.7/rg

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

January 25, 1990

Mr. E.D. Forslund
Vice President
Interstate Power Company
P.O. Box 769
Dubuque, Iowa 52004

Subject: M.L. Kapp Station
Steam Generating Unit 1
Supplemental Permit 74-A-117-S

Dear Mr. Forslund:

In accordance with provisions specified in subrule 567--22.3(5) of the Iowa Administrative Code, this letter represents a supplement to permit 74-A-117. The permit is revised as noted below.

ADDITIONAL CONDITIONS

The operation of steam generation unit 1 is subject to the restrictions of Conditions 1 and 2, specified below.

Condition 1 Between January 1, 1990, and May 1, 1990, steam generation unit 1 may be operated on coal, only on occasions when steam generation unit 2 is not also in production concurrently.

Condition 2 Beginning May 1, 1990, steam generation unit 1 shall be operated only on natural gas.

All other conditions of the permit remain the same.

Sincerely,

Michael Hayward

MICHAEL HAYWARD
AIR QUALITY SECTION
AIR QUALITY AND SOLID WASTE PROTECTION BUREAU

cc: F.O. 6

STATE OF IOWA

TERRY E. BRANSTAD, GOVERNOR

DEPARTMENT OF NATURAL RESOURCES
LARRY J. WILSON, DIRECTOR

January 29, 1990

Mr. E.D. Forslund
Vice President
Interstate Power Company
P.O. Box 769
Dubuque, Iowa 52004

Subject: M.L. Kapp Station
Steam Generator Unit 2
Supplemental Permit 78-A-157-S

Dear Mr. Forslund:

In accordance with provisions specified in subrule 567--22.3(5) of the Iowa Administrative Code, this letter represents a supplement to permit 78-A-157. The permit is revised as noted below.

ADDITIONAL CONDITIONS

Condition 1 -- Allowable Emission Rate

The allowable sulfur dioxide emission rate for steam generator Unit 2 is 4.3 pounds per million Btu of heat input, 3-hour rolling average.

If it is determined that gas conditioning is not necessary in Unit 2, compliance with the permit emission limit above shall be achieved no later than July 1, 1990.

If it is determined that gas conditioning is necessary in Unit 2, compliance with the permit emission limit above shall be achieved no later than February 1, 1991.

Condition 2 -- Emissions Monitoring Equipment

The permittee shall install, calibrate, maintain, and operate continuous emission monitoring (CEM) systems for the measurement of the sulfur dioxide and oxygen (or carbon dioxide) emissions from Unit 2. Installation shall be completed by June 1, 1990, with a certification report submitted to the Department no later than July 15, 1990.

Compliance with the sulfur dioxide emission limit of this permit shall be continuously demonstrated by the permittee through the use of the CEM system.

Condition 3 -- Installation, Evaluation and Operation of the Contin Monitoring System

The procedures under 40 C.F.R. 60.13 shall be followed for installation, evaluation and operation of the CEMS.

a. The continuous monitoring system shall be operated in accordance with procedures under Performance 2 an 3 of 40 C.F.R. Part 60, Appendix B.

b. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of 40 C.F.R. Part 60, Appendix F.

c. The span value of the CEM shall be 200 percent of the maximum estimated hourly potential sulfur dioxide emissions from the fuel combusted.

Condition 4 -- Record Keeping

The permittee shall maintain the following records in a manr suitable for inspection at the Clinton facility for a perioc of at least two years from the date of record. The permitte shall make such records available to the Department upor request:

a. The three-hour rolling average sulfur dioxide emissio rates measured by the CEM required by this permit.

b. Identification of the operating days for which sulfur dioxide emission data have not been obtained, includi reasons for not obtaining sufficient data and a description of corrective actions taken.

c. Identification of the times when emission data have been excluded from the calculation of average emissio rates and the reasons for excluding the data.

d. Identification of the times when the sulfur dioxide concentration exceeded the full span of the continuou monitoring system.

e. Description of any modifications or maintenance made the continuous monitoring system that could affect th the ability of the CEM to comply with 40 C.F.R. Part 60, Appendix B, Performance Specifications 2 and 3

f. Results of the daily continuous monitoring system drift tests and quarterly accuracy assessments conducted in accordance with 40 C.F.R. Part 60, Appendix F.

Condition 5 -- Excess Emissions

An incident of excess emissions of sulfur dioxide shall be reported to the Department in accordance with chapter 567--24 (455B) IAC. An incident of excess emissions is defined a: a three-hour period during which the average emission rate o: sulfur dioxide, as measured by the CEM, exceeds 4.3 pounds p million Btu heat input.

Condition 6 -- Reporting Requirements

The following operation, emissions and control reporting requirements of this condition shall begin the calendar quarter in which the CEM becomes operational, covering the entire quarter or portion thereof. This information shall be reported on the forms supplied by the Department.

a. The magnitude of excess emissions computed in accordance with Condition 4a, any conversion factor(s) used and the date and time of commencement and completion of each time period of excess emissions.

b. Specific identification of each period of excess emissions that occurs during startups and shutdowns of the affected facility. The nature and cause of any excess emission and the corrective action taken shall be reported.

c. The date and time identifying each period during which the CEM was inoperative except for zero and span check and the nature of the system repairs or adjustments.

d. When no excess emissions have occurred or the CEM has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

e. The results of the quarterly accuracy assessments as required by 40 C.F.R. Part 60, Appendix F.

Condition 7 -- Monitor Availability

Operation of the continous monitoring system with valid data capture of less than 95% of the source operating time during any calendar quarter is considered a violation of the permit.

Condition 8 -- Notification Requirements

Notification of the schedule for the relative accuracy determination required in Performance Specification 2 shall be provided to the Department in writing not later than fifteen (15) days before the test is performed. Such notice shall include, at a minimum, the time, the place and the name of the person who will conduct the test. Unless specifically

waived by the Department, a pretest meeting shall be held no later that fifteen (15) days prior to conducting the compliance demonstration. A representative of the Department shall be permitted to witness the tests.

All other conditions of the permit remain the same.

Sincerely,

Michael Hayward

MICHAEL HAYWARD
AIR QUALITY SECTION
AIR QUALITY AND SOLID WASTE PROTECTION BUREAU

cc: F.O. 6