

STATE OF MICHIGAN  
DEPARTMENT OF NATURAL RESOURCES  
AIR POLLUTION CONTROL COMMISSION

In the matter of administrative proceedings  
against THE DETROIT EDISON COMPANY, a corpora-  
tion organized under the laws of New York and  
Michigan and doing business at the foot of  
East Front Street, City of Monroe, County of  
Monroe, State of Michigan.

APC No. 09-1977

STIPULATION FOR ENTRY OF CONSENT ORDER  
AND  
FINAL ORDER.

This proceeding resulted from a request by The Detroit Edison Company, a New York and Michigan corporation [hereinafter referred to as the "Company"], doing business at the foot of East Front Street, City of Monroe, County of Monroe, State of Michigan, where the Company operates power generation facilities [hereinafter referred to as the "Power Plant"], to the Michigan Air Pollution Control Commission [hereinafter referred to as the "Commission"]. The Company has requested relief from the requirements of Performance Contract No. 873-04 and proposes to burn fuel with a sulfur content greater than allowed by Table 3 of Michigan Rule 336.49 (ACS No. 73, pages 30-32). The Company and the staff of the Air Quality Division of the Department of Natural Resources [hereinafter referred to as the "Staff"] hereby agree, subject to approval by the Commission, to the termination of this proceeding by entry of a Final Order by consent.

The Company and Staff hereby and herewith stipulate and agree as follows:

1. The Company admits and stipulates that the termination of this matter by a Final Order to be entered as a Consent Order is proper and acceptable.

2. The Staff and the Company acknowledge that certain sulfur dioxide emission limits set forth in Tables 3 and 4 of R 336.49, Administrative Code, 1973 AACs, became effective on July 1, 1975 and additional sulfur dioxide emission limits will become effective on July 1, 1978.

3. The Company and Staff further acknowledge that sulfur dioxide emissions from the Power Plant will be in excess of allowable limits according to the provisions of the aforementioned Tables 3 and 4 of R 336.49 if not abated in accordance with this Order.

4. The Commission finds that it has reasonable assurance that the Power Plant will not interfere with the maintenance of the National Ambient Air Quality Standards for Sulfur Oxides if the Company complies with the terms of this Order.

5. The Staff and the Company herewith and hereby stipulate and agree to the following program and time schedule for affirmative action:

(A) SULFUR DIOXIDE CONTROL PROGRAM AND EMISSION LIMITATIONS:

(1) Commencing six months from the effective date of this order, the Company shall not burn any fuel at the Power Plant which:

(a) Results in sulfur dioxide emissions greater than 1,580 tons per calendar day. The intent of this subparagraph is to be equivalent to burning coal at the Power Plant of 3.0 percent sulfur by weight, 12,000 BTU/pound of coal at 3,200 megawatts gross load.

(b) Results in sulfur dioxide emissions greater than 5.60 pounds per million BTU heat input per calendar day. The intent of this subparagraph is to be equivalent to burning coal at

the Power Plant of 3.5 percent sulfur by weight at 12,000 BTU/pound of coal.

(2) After January 1, 1980 and continuing until January 1, 1985, the Company shall not emit or cause the emission of sulfur dioxide in excess of a maximum of 3.68 pounds per million BTU heat input calculated on a calendar day basis. The intent of this subparagraph is to be equivalent to burning coal at the Power Plant of 2.3 percent sulfur by weight at 12,000 BTU/pound of coal.

(3) By January 1, 1982, the Company shall submit to the Staff an acceptable control strategy including increments of progress for the Power Plant which shall provide for compliance with the emission limits specified in Table 3, R 336.49, by not later than January 1, 1985. It is the intent of the Company and Staff to incorporate the elements of this control strategy into either a new or amended Consent Order.

(4) By January 1, 1985, the Company shall not emit or cause the emission of sulfur dioxide in excess of a maximum of 1.60 pounds per million BTU heat input calculated on a 24-hour average basis, unless an alternate compliance date is established for the Power Plant by subsequent amendment to the State Implementation Plan [as published in the Federal Register at 40 CFR 50].

(5) Annually from the date of final adoption of Section 5(A)(4), the Company shall submit to Staff (and upon request to the Commission) a report of the Company's progress towards complying with this Consent Order. Any developments which would preclude compliance by the Company with Section 5(A)(4) shall be immediately transmitted in writing to the Staff and the Commission.

**(B) MONITORING:**

(1) The Company shall operate a reasonable number of ambient air quality monitors in such manner and at such locations as specified by the Chief of the Air Quality Division, Department of Natural Resources.

(2) The Company shall install by January 7, 1978 for testing and certification purposes in-stack emission monitors for measuring sulfur dioxide and plume opacity. These monitors will be placed in operation as soon as possible, but not later than January 1, 1980.

(3) The Company shall demonstrate the adequacy of the in-stack sulfur dioxide monitor by measuring and providing fuel analyses in a manner approved by the Chief of the Air Quality Division, Department of Natural Resources.

(4) The Company shall measure and record the fuel firing rate at each boiler at the Power Plant.

(5) Beginning in 1977, the Company shall conduct periodic source emission tests for particulates from each unit. The tests shall be conducted at approximately 18-month intervals and in accordance with the Commission approved procedures.

**(C) DATA REPORTING:**

The Company shall submit data from the aforementioned ambient air quality monitors, in-stack monitors, fuel analyses, fuel firing rate and particulate testing in such format and at such intervals as specified by the Chief of the Air Quality Division, Department of Natural Resources, subject to the Company having the opportunity to appeal such require-

ments to the Commission. If the Company fails to submit the above data as specified, such failure shall constitute a violation of this order unless the Company promptly provides the Commission with an acceptable reason for such failure.

(D) EXCURSIONS ABOVE AIR QUALITY STANDARDS:

In the event that either the Company or the Staff determines at any time that any one of the sulfur dioxide monitors referred to in paragraph (B)(1), above, or any one similar monitor operated by the Staff or the Wayne County Health Department in Wayne or Monroe counties, measures an ambient sulfur dioxide excursion [an excursion is a single ambient concentration above  $365 \mu\text{g}/\text{m}^3$  (0.14 ppm) calculated on a running 24-hour average or above  $1,300 \mu\text{g}/\text{m}^3$  (3.50 ppm) calculated on a running 3-hour average], then the Company shall:

(1) Within 45 days reduce the mass rate of sulfur dioxide emissions from the Power Plant according to the following applicable formula:

(a) For an excursion of the running 3-hour average:

$$\text{Interim Reduction} = 110 - \frac{130,000}{\text{Excursion}}$$

where Excursion = maximum 3-hour running average ( $\mu\text{g}/\text{m}^3$ )

(b) For an excursion of the running 24-hour average:

$$\text{Interim Reduction} = 110 - \frac{35,500}{\text{Excursion}}$$

where Excursion = maximum 24-hour running average ( $\mu\text{g}/\text{m}^3$ )

It is understood that the Interim Reduction shall be applied as a percentage to the mass rate of sulfur dioxide emission corresponding to

the emission during the excursion. It is further understood that the Interim Reduction shall remain in effect until such time as the Company is in compliance with the emission limits specified in Table 3 of R 336.49. The Company and Staff further agree that additional Interim Reductions may be required in the event of a subsequent excursion. The Interim Reduction, however, shall not result in a sulfur dioxide emission limit that would be more stringent than the requirements of Table 3 of R 336.49.

The Company will be relieved of this Interim Reduction requirement if: (a) it demonstrates to the Commission's satisfaction, utilizing the procedure attached hereto as Appendix I, that the Power Plant's contribution to the excursion is less than 20 percent; or (b) it has received the Commission's approval to implement and does implement an alternate interim emission reduction program. Further, the Company may be relieved of this Interim Reduction if it demonstrates to the Commission's satisfaction that the excursion was likely caused by an unusual release of sulfur dioxide by a source other than the Power Plant. Notwithstanding possible relief from the Interim Reduction requirement, the Company shall still be required to comply with paragraphs (D)(2) and (3), following.

(2) Within four (4) months, submit an acceptable program to the Commission in writing which provides for compliance with the emission limits of Table 3 of R 336.49. The Company will be relieved of the requirement to submit such a program if it demonstrates to the Commission's satisfaction by utilizing the procedure attached hereto

as Appendix I, that the Power Plant's contribution to the excursion was not greater than 10%. Determining compliance with this section shall be made in accordance with the following examples:

| <u>Measured Value of<br/>the Excursion</u> | <u>Permitted 10 Percent<br/>Contribution of Power Plant</u> |
|--|---|
| Total = 400 $\mu\text{g}/\text{m}^3$       | 40 $\text{g}/\text{m}^3$ or less                            |

Notwithstanding the provisions of (D)(3), below, the Company will not be required to implement such a program unless between the date of excursion to which the Power Plant's contribution was greater than 10% and January 1, 1985, a second excursion occurs to which the Power Plant's contribution was also greater than 10%. It is the intent of the parties to develop and enter into the Consent Order referred to in (D)(3), below, after the first excursion, but not to implement the program until after the second excursion.

(3) Within seven (7) months enter a Consent Order with the Commission, for implementation of the program referred to in paragraph (D)(2), above. The Company will be relieved from the requirements to enter into the Consent Order and implement the program submitted in paragraph (D)(2), above, if it successfully makes the demonstration referred to in (D)(2), above. The Company may be relieved from the requirements to submit an acceptable program, enter into the Consent Order, and implement the program submitted in (D)(2), above, if it demonstrates to the Commission's satisfaction that the excursion was likely caused by an unusual release of sulfur dioxide by a source other than the Power Plant.

## 6. MODIFICATION OR REVOCATION OF ORDER:

(A) The Staff and the Company agree that the entry of this Consent Order is without prejudice to the Company's rights to petition the Commission for modifications of any provision of this Consent Order in the event that the Company, for any good cause, including the impact of compliance with the terms of this order, believes that a reconsideration is appropriate.

(B) The Commission may modify or revoke this order granting an extension of the dates for compliance with Tables 3 and 4 if the Commission deems it necessary for any of the following reasons:

(1) The Commission determines that the person granted the extension has not adequately complied with the terms, conditions and requirements of the order issued by the Commission, including but not limited to monitoring, reporting and fuel specifications.

(2) The Commission determines that the public health, safety or welfare may be adversely affected by any further compliance extension.

(3) The Commission determines that further reductions in the Power Plant's sulfur dioxide emissions would allow the location of a new source or modification of an existing source, and without the reduction the new source or modification of an existing source would not be permitted. However, such reduction shall not be greater than that necessary to permit the location of the new source or the modification to the existing source, and such reduction shall not be more stringent than the requirements of Table 3 of R. 336.49.



(4) The Commission determines that the original data submitted by the applicant on the application requesting an extension is materially inaccurate.

(5) The Commission determines that federal law or rules would prohibit or make unlawful further extension.

7. Staff and the Company both acknowledge that a public hearing on this abatement program was held on April 18, 1977. Both Staff and the Company hereby consent to enforcement of this Stipulation and Final Order in the same manner and by the same procedures for all final orders entered pursuant to Section 16 of Act 257 of the Public Acts of 1972, being Section 336.26 of the Michigan Compiled Laws, including, but not limited to, enforcement by legal action brought under 1972 PA 257 and/or 1970 PA 127.

Approved as to Form and Content:

Charles M. Heibel

THE DETROIT EDISON COMPANY

Dated: 6/8/77

Approved as to Content:

Lee E. Jager

Lee E. Jager, Chief  
AIR QUALITY DIVISION  
DEPARTMENT OF NATURAL RESOURCES

Dated: 6-13-77

Approved as to Form:

Stewart H. Freeman

Stewart H. Freeman  
Assistant Attorney General  
DEPARTMENT OF ATTORNEY GENERAL

Dated: June 23, 1977

FINAL ORDER

This Commission having reviewed the above stated Stipulation for Entry of Consent Order, and this Commission being satisfied with the form and content of the proposed Consent Order,

IT IS ORDERED that this Consent Order shall be entered in the record of this Commission as a Final Order.

AIR POLLUTION CONTROL COMMISSION

By: M. Peizen  
Maurice S. Peizen, M.D., Chairman  
Dated: 7/7/77