

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

4/30/80

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
CONSUMERS POWER COMPANY	)	Docket Nos. 50-329
(Midland Plant, Units 1 and 2)	)	50-330
	)	(Hearing on Order for
	)	Modification of CP)

NRC STAFF MOTION FOR ISSUANCE OF  
AMENDED NOTICE OF HEARING

1. On December 6, 1979, the Director of the Office of Inspection and Enforcement and the Acting Director of the Office of Nuclear Reactor Regulation issued an Order Modifying Construction Permits with respect to Midland, Units 1 and 2. The Order specifically prohibited Consumers Power Company from performing certain soil-related activities pending approval of amendments to its construction permits. Through inadvertence this Order was not published in the Federal Register nor does it appear that copies were sent to any persons other than the permittee (sometimes referred to as licensee), although the Order provided that:

The Licensee or any person whose interest is affected by this Order may within 20 days of this Order request a hearing with respect to all or any part of this Order.

Order at 6. On December 26, 1979, permittee filed a request for a hearing with respect to the Order. No other person or entity filed a request for a hearing.

2. Following a receipt of the permittee's request, the Commission published a notice of hearing with respect to the Order and designated this Atomic Safety and Licensing Board to preside. 45 Fed. Reg. 18214 (March 20, 1980).

The notice further provided that the Licensee should file its answer to the notice by no later than April 9, 1980; this time was later extended by this Board until April 16, 1980, and an answer was filed by the Licensee on that date. No other pleadings have been filed in this proceeding.

3. To insure that the public is provided with an opportunity to request a hearing in this matter, and to cure any defects created by the failure to publish in the Federal Register the December 6, 1979 Order Modifying Construction Permits, the Staff hereby moves this Board for an Order amending the March 20, 1980 notice of hearing in this proceeding to provide an opportunity to interested persons to seek to intervene in this matter.<sup>1/</sup> Because of the nature of this request, the relief sought is clearly within the jurisdiction of this Board,<sup>2/</sup> and fully consistent with the opportunity for hearing originally provided to the public in the December 6, 1979 Order initiating this action.

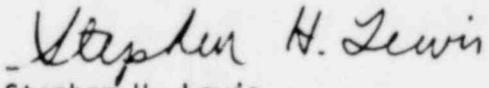
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<sup>1/</sup> Since parties to the ongoing operating licensing proceeding have raised, and there have been admitted, contentions relating to the soil foundation materials issue, we request that the Board serve copies of its amendment to the notice of hearing, if granted, upon all of the parties to that proceeding.

<sup>2/</sup> Licensing Boards have, for example, issued amended notices of hearing where there has been a change in the identity of the joint applicants. See, for example, Arizona Public Service Co. (Palo Verde, Units 1, 2, and 3), 40 Fed. Reg. 59495 (December 24, 1975) and Northern States Power Co. (Tyrone), 41 Fed. Reg. 30218 (July 22, 1976).

4. Attached hereto is a proposed Amended Notice of Hearing for the Board's consideration.

Respectfully submitted,

  
Stephen H. Lewis  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 30th day of April, 1980.

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CERTIFICATE OF SERVICE

I hereby certify that copies of "NRC STAFF MOTION FOR ISSUANCE OF AN AMENDED NOTICE OF HEARING" in the above-captioned proceeding have been served on the following by deposit in the United States mail, first class or, as indicated by an asterisk, through deposit in the Nuclear Regulatory Commission's internal mail system, this 30th day of April, 1980.

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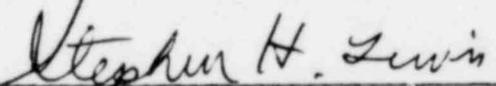
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NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
CONSUMERS POWER COMPANY	)	Docket Nos. 50-329
(Midland Plant, Units 1 and 2)	)	50-330
	)	(Hearing on Order for
	)	Modification of CP)

AMENDED NOTICE OF HEARING

On March 20, 1980, the Commission published a Notice of Hearing (45 Fed. Reg. 18214) on certain issues relative to an Order Modifying Construction Permits of the Acting Director of Nuclear Reactor Regulation and the Director of Inspection and Enforcement dated December 6, 1979, which would prohibit Consumers Power Company from performing certain soil-related activities pending approval of amendments to the construction permits. Consumers Power Company requested a hearing on the Order. The Order of December 6, 1979 was not published in the Federal Register. This Atomic Safety and Licensing Board, which has jurisdiction of this matter pursuant to the Notice of Hearing (45 Fed. Reg. 18214), has determined that there should be a publication of the December 6, 1979 Order, which is attached hereto. In addition to the information published previously, notice is given that by (date) any person whose interest may be affected by this proceeding may file a petition for leave to intervene. The petitions for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 C.F.R. Part 2. If a petition for leave to

intervene is filed, the Atomic Safety and Licensing Board will rule on the request.

As required by 10 C.F.R. § 2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend his petition, but such an amended petition must satisfy the specificity requirements described above.

Not later than fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, the petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter, and the bases for each contention set forth with reasonable specificity. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

A petition for leave to intervene must be filed with the Secretary of the Commission, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Docketing and Service Section, or may be delivered to the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., by (date). A copy of the petition should also be sent to the Executive Legal Director, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, and to Michael I. Miller, Esq., Isham, Lincoln and Beale, One First National Plaza, Chicago, Illinois 60690, attorney for the Permittee. Any questions or requests for additional information regarding the content of this notice should be addressed to the Chief Hearing Counsel, Office of the Executive Legal Director, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555.

Nontimely filings of petitions for leave to intervene, amended petitions, or supplemental petitions will not be entertained absent a determination by the Atomic Safety and Licensing Board that the petitioner has made a substantial showing of good cause for the granting of a late petition. That determination will be based upon a balancing of the factors specified in 10 C.F.R. § 2.714(a)(i)-(v) and § 2.714(d).

For the U. S. Nuclear Regulatory Commission

Ivan W. Smith, Chairman  
Atomic Safety and Licensing Board

Dated at Bethesda, Maryland  
this

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of

CONSUMERS POWER COMPANY  
(Midland Nuclear Power Plant,  
Units 1 and 2)

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Docket No. 50-329  
50-330

ORDER MODIFYING CONSTRUCTION PERMITS

I

The Consumers Power Company (the Licensee) is a holder of Construction Permits No. CPPR-81 and No. CPPR-82 which authorize the construction of two pressurized water reactors in Midland, Michigan. The construction permits expire on October 1, 1981 and October 1, 1982, for Unit 2 and Unit 1 respectively.

II

On August 22, 1978, the Licensee informed the NRC Resident Inspector at the Midland site that unusual settlement of the Diesel Generator Building had occurred. The Licensee reported the matter under 10 CFR 50.55(e) of the Commission's regulations by telephone on September 7, 1978. This notification was followed by a series of interim reports dated September 29, 1978, November 7, 1978, December 21, 1978, January 5, 1979, February 23, 1979, April 3, 1979, June 25, 1979, August 10, 1979, September 5, 1979, and November 2, 1979.

Following the September 1978 notification, inspectors from the Region III, Office of Inspection and Enforcement, conducted an investigation over the period of October 1978 through January 1979. This investigation revealed a breakdown in quality assurance related to soil construction activities under and around safety-related structures and systems in that (1) certain design and construction specifications related to foundation-type material properties

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and compaction requirements were not followed; (2) there was a lack of clear direction and support between the contractor's engineering office and construction site as well as within the contractor's engineering office; (3) there was a lack of control and supervision of plant fill placement activities which contributed to inadequate compaction of foundation material; (4) corrective action regarding nonconformances related to plant fill was insufficient or inadequate as evidenced by repeated deviations from specification requirements; and (5) the FSAR contains inconsistent, incorrect, and unsupported statements with respect to foundation type, soil properties and settlement values. The details of these findings are described in the inspection reports 50-329/78-12, 50-330/78-12 (November 14, 1978) and 50-329/78-20, 50-330/78-20 (March 19, 1979) which were sent to the Licensee on November 17, 1978 and March 22, 1979 respectively.

The items of noncompliance resulting from the NRC investigation are described in Appendix A to this Order. In addition, as described in Appendix B to this Order, a material false statement was made in the FSAR in that the FSAR falsely stated that "All fill and backfill were placed according to Table 2.5-9." This statement is material in that this portion of the FSAR would have been found unacceptable without further Staff analysis and questions if the Staff had known that Category I structures had been placed in fact on random fill rather than controlled compacted cohesive fill as stated in the FSAR.

As a result of questions raised during the NRC investigation of the Diesel Generator Building settlement, additional information was necessary to evaluate

the impact on plant safety caused by soil conditions under and around safety-related structures and systems in and on plant fill, and the Licensee's related quality assurance program. On March 21, 1979, the Director, Office of Nuclear Reactor Regulation, formally requested under 10 CFR 50.54(f) of the Commission's regulations information concerning these matters to determine whether action should be taken to modify, suspend or revoke the construction permit. Additional information was requested by the Staff in letters dated September 11, 1979 and November 19, 1979. The Licensee responded to these letters, under oath, in letters dated April 24, 1979, May 31, 1979, July 9, 1979, August 10, 1979, September 13, 1979, and November 13, 1979. The Licensee has not yet responded to the November 19, 1979 requests.

Several of the Staff's requests were directed to the determination and justification of acceptance criteria to be applied to various remedial measures taken and proposed by the licensee. Such criteria, coupled with the details of the remedial action, are necessary for the Staff to evaluate the technical adequacy and proper implementation of the proposed action. The information provided by the licensee fails to provide such criteria. Therefore, based on a review of the information provided by the Licensee in response to the Staff questions, the Staff cannot conclude at this time that the safety issues associated with remedial action taken or planned to be taken by the Licensee to correct the soil deficiencies will be resolved. Without the resolution of these issues the Staff does not have reasonable assurance that the affected safety-related portions of the Midland facility will be constructed and operated without undue risk to the health and safety of the public.

III

Under the Atomic Energy Act of 1954, as amended, and the Commission's regulations, activities authorized by construction permits or portions thereof may be suspended should the Commission find information which would warrant the Commission to refuse to grant a construction permit on an original application. We have concluded that the quality assurance deficiencies involving the settlement of the Diesel Generator Building and soil activities at the Midland site, the false statement in the FSAR, and the unresolved safety issue concerning the adequacy of the remedial action to correct the deficiencies in the soil construction under and around safety-related structures and systems are adequate bases to refuse to grant a construction permit and that, therefore, suspension of certain activities under Construction Permits No. CPPR-81 and No. CPPR-82 is warranted until the related safety issues are resolved.

IV

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, IT IS HEREBY ORDERED THAT, subject to Part V of this Order, Construction Permits No. CPPR-81 and No. CPPR-82 be modified as follows:

- (1) Pending the submission of an amendment to the application seeking approval of the remedial actions associated with the soil activities for safety-related structures and systems founded in and on plant fill material and the issuance of an amendment to Construction Permits No. CPPR-81 and

and No. CPPR-82 authorizing the remedial action, the following activities are prohibited:

- (a) any placing, compacting, or excavating soil materials under or around safety related structures and systems;
  - (b) physical implementation of remedial action for correction of soil-related problems under and around these structures and systems, including but not limited to:
    - (i) dewatering systems
    - (ii) underpinning of service water building
    - (iii) removal and replacement of fill beneath the feedwater isolation valve pit area
    - (iv) placing caissons at the ends of the auxiliary building electrical penetration areas
    - (v) compaction and loading activities;
  - (c) construction work in soil materials under or around safety-related structures and systems such as field installation of conduits and piping.
- (2) Paragraph (1) above shall not apply to any exploring, sampling, or testing of soil samples associated with determining actual soil properties on site which has the approval of the Director of Region III, Office of Inspection and Enforcement.

Appendix ANOTICE OF VIOLATION

Consumers Power Company

Docket No. 50-329

Docket No. 50-330

This refers to the investigation conducted by the Office of Inspection and Enforcement at the Midland Nuclear Power Plant, Units 1 and 2, Midland, Michigan, at your offices in Jackson, Michigan, and at Bechtel Corporation, Ann Arbor, Michigan of activities authorized by NRC License No. CPPR-81 and No. CPPR-82.

Based on the results of the investigation conducted during the period December 11, 1978 through January 25, 1979, it appears that certain of your activities were not conducted in full compliance with NRC requirements as noted below. These items are infractions.

1. 10 CFR 50, Appendix B, Criterion III requires, in part, that measures shall be established and executed to assure that regulatory requirements and the design basis as specified in the license application for structures are correctly translated into specifications, drawings, procedures and instructions. Also, it provides that measures shall be established for the identification and control of design interfaces and for coordination among participating design organizations.

CPCo Topical Report CPC-1-A, Policy No. 3, Section 3.4 states, in part, "the assigned lead design group or organization (i.e., the NSSS supplier, A&E supplier, or CPCo) assure that designs and materials are suitable and that they comply with design criteria and regulatory requirements."

CPCo is committed to ANSI N45.2 (1971), Section 4.1, which states, in part, "measures shall be established and documented to assure that the applicable specified design requirements, such as a design basis, regulatory requirements . . . are correctly translated into specifications, drawings, procedures, or instructions."

Contrary to the above, measures did not assure that design bases were included in drawings and specifications nor did they provide for the identification and control of design interfaces. As a result, inconsistencies were identified in the license application and in other design basis documents. Specific examples are set forth below:

- a. The FSAR is internally inconsistent in that FSAR Figure 2.5-4B indicates settlement of the Diesel Generator Building on the order of acceptance criteria

DUPLICATE DOCUMENT

Entire document previously entered  
into system under:

ANO 7912200648No. of pages: 4

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APPENDIX BNOTICE OF VIOLATION

Consumers Power Company

Docket No. 50-329

Docket No. 50-330

This refers to the investigation conducted by the Office of Inspection and Enforcement at the Midland Nuclear Power Plant, Units 1 and 2, Midland, Michigan, at your offices in Jackson, Michigan, and at Bechtel Corporation, Ann Arbor, Michigan, of activities authorized by NRC License No. CPPR-81 and No. CPPR-82.

During this investigation conducted on various dates between December 11, 1978 and January 25, 1979, the following apparent item of noncompliance was identified.

The Midland Final Safety Analysis Report (FSAR) contains the following:

Section 2.5.4.5.3, Fill, states: "All fill and backfill were placed according to Table 2.5-9."

Table 2.5-9, Minimum Compaction Criteria, contains the following:

<u>"Function</u>	<u>Zone (1) Designation</u>	<u>Soil Type</u>	<u>Compaction Criteria</u>	
			<u>Degree</u>	<u>ASTM Designation</u>
Support of structures		Clay	95%	ASTM D 1557-66T (modified) <sup>(2)</sup>

(1) For zone designation see Table 2.5-10.

(2) The method was modified to get 20,000 foot-pounds of compactive energy per cubic foot of soil."

Section 2.5.4.10.1, Bearing Capacity, states: "Table 2.5-14 shows the contact stress beneath footings subject to static and static plus dynamic loadings, the foundation elevation, and the type of supporting medium for various plant structures."

Table 2.5-14, Summary of Contact Stresses and Ultimate Bearing Capacity for Mat Foundations Supporting Seismic Category I and II Structures, contains, in part; the following:

<u>"Unit</u>	<u>Supporting Soils</u>
Diesel Generator Building	Controlled compacted cohesive fill."

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Appendix B

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This information is false, in that materials other than controlled compacted cohesive fill were used to support the diesel generator building and information presented concerning the supporting soils influenced the staff review of the FSAR.