

U.S. NUCLEAR REGULATORY COMMISSION  
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No. 50-329/80-29; 50-330/80-30

Docket No. 50-329; 50-330

License No. CPPR-81; CPPR-82

Licensee: Consumers Power Company  
1945 West Parnall Road  
Jackson, MI 49201

Facility Name: Midland Nuclear Power Plant, Units 1 and 2

Inspection At: Midland Site, Midland, MI

Inspection Conducted: September 1-30, 1980

Inspector: R. J. *R. J. Cook*

Approved By: R. C. Knop, Chief  
Projects Section 1

10/1/80  
10/3/80

Inspection Summary

Inspection on September 1-30, 1980 (Report Nos. 50-329/80-29; 50-330/80-30)  
Areas Inspected: Examination of site conditions; core support assembly procedures; attendance at meeting with petitioners to intervene in the Soils Hearing; damage to Diesel Generator 1G11 rotor; welding procedure changes for installation of HVAC systems; timeliness of QC inspections for installation of HVAC systems. This inspection effort involved a total of 49 inspection hours by one NRC inspector.  
Results: No items of noncompliance or deviations were identified.

*EDL 060292*

## DETAILS

### Persons Contacted

#### Consumers Power Company Personnel

D. Miller, Site Manager  
T. Cooke, Project Superintendent  
\*J. Corley, Site Project QA Superintendent  
\*D. Keating, IE&TV Section Head  
M. Schaeffer, Electrical Supervisor  
F. Pimentel, NDE & Welding QA Supervisor  
M. DeWitt, QA Mechanical  
D. Hendrix, QA Electrical

Numerous other principal staff and personnel were contacted during the reporting period.

\*Denotes those present during the exit interviews conducted during the reporting period.

#### Licensee Action on Previous Inspection Findings

(Closed) Unresolved Item No. (329/79-28-01; 330/79-28-01); The Resident Inspector examined a letter from B&W to Consumers Power Company dated July 30, 1980, which offers an explanation for not having current valid vessel internal assembly procedures on site during the initial attempt at fitting the core support assembly guide blocks. The letter identifies a weakness in B&W Engineering Procedures which allowed Task Engineers the responsibility of upgrading the Midland plant procedures contingent upon changes to other plants. The Task Engineers failed to upgrade the Midland core support assembly procedures to reflect changes which were required at other facilities.

To preclude failure of implementing current changes at affected sites, the B&W Site Problem Report Procedures were modified such that all contract Project Engineers must implement appropriate changes or report why implementation is not necessary.

Implementation of the B&W Engineering and Site Problem Report Procedures is being referred to the NRC Vendor Inspection Branch for further evaluation. This item is considered closed.

#### Functional or Program Areas Inspected

##### 1. Site Tours

At periodic intervals during the report period, tours of selected site areas were performed. These tours were intended to assess the

cleanliness of the site; storage conditions of equipment and piping being used in site construction; the potential for fire or other hazards which might have a deleterious effect on personnel and equipment, and to witness construction activities in progress.

2. Meeting With Soils Hearing Petitioners

On September 3, 1980, the Resident Inspector attended a meeting between those individuals petitioning to intervene in the Soils Settlement Hearing, Consumers Power Company and NRR. The intent of the meeting was to clearly describe the contentions of the petitioners so that these contentions would be clearly understood by all parties involved prior to the ASLB prehearing conference scheduled for September 10, 1980 at Midland, MI. The petitioners are acting without legal council, therefore, legal proceedings and protocol were explained during the meeting. The petitioners to intervene had submitted their contentions to the NRC prior to the meeting. Each contention was discussed and any necessary clarifications were offered.

3. Damage to Diesel Generator Electrical Rotor

During the reporting period, the electrical rotor for Diesel Generator 1G11 was transferred from storage to installation in the diesel generator. During this transfer, the rotor sustained physical damage to a pole winding coil form; insulation on a lead cable from a winding; and deformed threads on a frame bolt. This damage occurred when the rotor was lifted using a "J-hook" which did not appear to have proper clearances to prevent interference with the internal portions of the rotor and/or the rotor was not lifted using steady slings. Lifting of the rotor may not have been performed as described in the manufacturers literature and the source of the design for the "J-hook" has not been established.

Bechtel Power Corporation initiated Nonconformance Report No. 3126 to address the damage to the rotor and to follow subsequent repairs. Consumers Power Company initiated Quality Action Request No. F-008 to address the potential lack of specific written procedures for the handling of the diesel generator rotors. Consumers Power Company also initiated Nonconformance Report No. M-01-9-0-059 to address removal of the diesel generator rotor from storage without appropriate QC verification for handling and for failure to issue an F-10 form to include any manufacturer's special handling procedures. This item is considered unresolved pending the determination for QC involvement and the adequacy of the manufacturer's handling instructions for transfer of the diesel generator rotors. Unresolved Item (329/80-29-01; 330/80-30-01).

4. Welding Procedure Changes for Installation of Heating, Ventilating and Air Conditioning (HVAC) Systems

As a condition for the resumption of safety related work by the Zack Company, Consumers Power Company imposed the following commitment . . .

"there is to be no MGAW welding of A-36 or A-572, Grade 50, material less than 10 gauge with .035 diameter weld wire pending qualification of procedure WPS-1 for the .035" weld wire. An alternative to the qualification is to clarify Section 5.2 of Procedure WPS-1 to delineate on which materials the different diameters of weld wire may be used. (Refer NRC Inspection Report No. 50-329/80-21; 50-330/80-22)

During the reporting period, Zack Co. welding procedure No. WPS-1 for Gas Metal Arc Welding, Section 5.2, was changed to reflect the use of 0.035" diameter electrodes when one or both base metals are less than 1/8" thick and 0.045" diameter electrodes when both base metals are 1/8" thick or greater. Similarly, welding procedure No. WPS-2 for Shielded Metal Arc Welding, Section 5.2, was changed to reflect the use of 3/32" diameter electrodes when one or both base metals are less than 1/8" thick and 1/8" and 3/32" diameter electrodes when the base metals are 0.1382" (10 Ga.) or 1/8" thick. This fulfills the above referenced commitment made by Consumers Power Company.

5. Timeliness of QC Inspections for Installation of HVAC Systems

As a condition for the resumption of safety-related work by the Zack Company, Consumers Power Company agreed to develop within 30 days of the release from the Stop Work Order of March 20, 1980, a mechanism to assure that Zack QC inspections are performed in a timely manner and thus avoid "backlog" inspection conditions which existed prior to March 20, 1980. (Refer NRC Inspection Report No. 50-329/80-21; 50-330/80-22)

During the reporting period, the licensee modified their Project Inspection Plans for HVAC - Material Receiving and Storage, HVAC - Field Fabrication, and HVAC - Installation to reflect the date an inspection is initiated by Zack Co. and the length of time to close the inspection record or inspect a designated QC Hold Point. If this time frame exceeds two weeks for installation or field fabrication and three weeks for material receiving and storage, Consumers Power Company Management is made aware of the situation by the requirements of the Project Inspection Plan. The initiation of an inspection is dated at the time an inspection is requested under the provisions of Field Quality Control Procedures FQCP-5, Installation. The licensee stated this mechanism should ensure that timely QC inspections are being performed and retains the latitude to alter the monitoring program if inadequacies are detected. This fulfills the above referenced commitment made by Consumers Power Company.

### Unresolved Matters

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. One unresolved item disclosed during the inspection is discussed in Paragraph 3.

### Exit Interview

The Resident Inspector attended the Exit Interview conducted by K. Ward, Region III Reactor Inspector on September 24, 1980.

The Resident Inspector met with licensee representatives (denoted under Persons Contacted) on September 30, 1980. The inspector summarized the scope and findings of the inspection effort to date. The licensee acknowledged the findings reported herein.

Attachment: Preliminary Inspection Findings

POOR ORIGINAL

PRELIMINARY INSPECTION FINDINGS

1. LICENSEE

Consumers Power Company  
1943 West Parnall Road  
Jackson, MI 49201  
Midland Unit 1 (Midland, MI)  
Midland Unit 2 (Midland, MI)

2. REGIONAL OFFICE

U. S. Nuclear Regulatory Commission  
Office of Inspection & Enforcement, RIII  
799 Roosevelt Road  
Glen Ellyn, IL 60137

3. DOCKET NUMBERS

50-529 50-530

4. LICENSE NUMBERS

OPPR-81 OPRR-82

5. DATE OF INSPECTION

August 28 - September 30, 1980

6. Within the scope of the inspection, no items of noncompliance or deviation were found.

7. The following matters are preliminary inspection findings:

The absence of specific written procedures for the handling of Diesel Generator 1G11 rotor and removal from storage without apparent QC verification for handling the rotor and the resultant damage to the rotor is considered an unresolved item pending the determination for QC involvement and the adequacy of manufacturer's handling instructions.

8. These preliminary inspection findings will be reviewed by NRC Supervision/Management at the Region III Office and they will correspond with you concerning any enforcement action.

R. J. Cook  
Nuclear Regulatory Commission Inspector