

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Reports No. 50-329/84-21(DRP); 50-330/84-22(DRP)

Docket Nos. 50-329; 50-330

Licenses No. CPPk-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: June 1 through June 30, 1984

Inspectors: P. L. Hiland

B. L. Burgess

H. H. Livermore

R. N. Gardner

R. B. Landsman

Approved By: *RFWarmick for*
J. J. Harrison, Chief
Section 1D, Midland

7/12/84
Date

Inspection Summary

Inspection on June 1 through June 30, 1984 (Reports No. 50-329/84-21(DRP);
~~50-330/84-22(DRP)~~)

Areas Inspected: Remedial soils work activities, allegations, turbine roll, status assessment and quality verification programs (CCP Phase I) and progress, CCP activities, FOIA activities, correspondence received, and plant tours. This inspection involved a total of 220 inspector-hours onsite by five NRC inspectors, including 35 inspector-hours during off-shifts.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Consumers Power Company (CPCo)

J. Cook, Vice President
*R. Wells, MPQAD, Executive Manager
*D. Quamme, Site Manager
J. Mooney, Soils, Executive Manager
B. Peck, Construction Superintendent
R. Wheeler, Technical Section Head
*R. Landon, Licensing Manager

Bechtel Power Corporation

M. Dietrich, PQAE
*G. Hertzler, Construction Manager

*Denotes exit meeting attendees.

Other licensee and contractor personnel were routinely contacted during the course of the inspection.

2. Remedial Soils Work Activities

- a. The inspectors reviewed and authorized the following work activities during the report period:
- (1) Piers E7 and W7.
 - (2) Installation of dowels at FIVPs.
 - (3) Piers CT5 and CT8.
 - (4) Installation of temporary buckets between control tower and turbine building.
 - (5) Exploratory chipping of SWPS duct bank crack.
 - (6) Piers E3 and W3.
 - (7) SWPSs piers 1 and 1A.
 - (8) Installation of tie-backs and struts at EPA piers.
 - (9) Mass excavation of zones Y-4A and Z-4A.

- b. During the report period the inspectors toured the auxiliary building underpinning and concluded that the work is progressing satisfactorily and there were no NRC inspection findings.

3. Followup on Allegations

A review was performed of an allegation concerning the Midland Plant as follows:

(Closed) RIII-83-A-0142 (329/330/82#10-01): Grinding wheels used in polishing welds were not of the safety grades required by NRC Codes.

Findings: The allegation involving the use of improper types of grinding wheels on austenitic stainless steel pipe was initially identified during ASLB hearings in November 1982. The concern identified was that "the grinding wheels that are used in polishing the welds were not of the safety grades that are required by the NRC Code" and that "these grinding wheels are of a lower grade, contain ferric oxide, and therefore will corrode the welds they are used on." During the ASLB hearing Chairman Bechhoefer suggested to one of the intervenors that this issue be brought to the NRC staff's attention. Subsequently in December 1982 the issue was identified to the Region III staff, with the source being anonymous. The applicant (Consumers Power Company) responded to the ASLB on December 14, 1982 and on February 3, 1983, addressing this allegation. The staff reviewed the hearing transcript, CPCo's response, NCR No. M01-9-2-172 (issued to address this allegation), and CPCo's corrective action to this NCR. The NCR identified two issues related to the grinding wheel nonconformance, (1) field material requisitions and purchase orders did not impose the requirements of Specifications M-204 and M-205 for grinding wheels (aluminum oxide or silicon carbide only), and (2) Project Quality Control Instructions PW-1.00 and W-1.60 did not address the application of grinding wheels. The staff review determined that grinding wheels that were being used at the Midland plant were of the appropriate types and that the wheels were identified with white paint to assure use on stainless steel only. The staff determined that the CPCo corrective action was appropriate and adequate, in that the PQCI's were revised and action taken to ensure requisitions and purchase orders contain the proper specification requirements.

It should also be noted that the NRC does not have a requirement (code) for grinding wheels. We do, however, have a concern as to the type of grinding wheels utilized for stainless steel piping. The staff reviewed the chemical composition for typical abrasive wheels used at Midland. The analysis revealed the ferrous oxide content to be .2%, this amount is inherent in the manufacturing process and is insignificant for use on stainless steel. Stainless steel piping grades used at Midland (304, 309, and 316) all have trace elements that include a ferrous content of .08% to .15%. The staff concluded that the small amount of ferrous oxide in grinding wheels has no detrimental effect on austenitic stainless steel. The staff concluded the type of grinding wheels utilized at Midland, their control, and the corrective action by Consumers Power Company was both appropriate and adequate. This allegation therefore is considered closed.

4. Turbine Roll

On Wednesday, June 13, 1984, the licensee admitted steam from the auxiliary boilers to the Unit 2 Turbine Generator (TG) for the first time. The Unit 2 TG was brought to 100 RPM for approximately two minutes before an electrical problem in the electro-hydraulic control (EHC) system required Unit 2 TG trip to repair. Following isolation of the EHC system problem, the Unit 2 TG was warmed according to approved procedures and brought to operating speed (1800 RPM) at 11:54 p.m. on June 13, 1984. After assuring proper operation of the turbine and turbine support systems, the generator was synchronized and paralleled to the electrical grid on June 14, 1984, at 3:44 a.m. The generator was loaded to approximately 10 megawatts with a brief peak load of 20 megawatts. Completion of a 14 minute load interval was accomplished prior to Unit 2 TG trip. Subsequently the same day, the Unit 2 TG was warmed and brought to 1800 RPM to allow adjustment of the TG lube oil system. Local press representatives were admitted onsite for the final turbine roll and lube oil adjustment exercise.

The Resident Inspectors observed turbine roll preparations, interviewed control room and auxiliary operators, and conducted numerous plant tours to verify equipment and system lineups prior to, during, and subsequent to the turbine roll exercise.

5. Status Assessment and Quality Verification Program (CCP Phase I) Progress

As of June 15, 1984, ten percent of the total project scope for Phase I CCP activities was complete. The licensee's schedule for Phase I activities estimated that 31 percent of the total project scope would be completed by June 15. The inability to maintain the current schedule for Phase I activities is apparently due to manpower shortages in both Bechtel Engineering and MPQAD (i.e. scheduled BPCo men = 150, actual BPCo men = 94; scheduled MPQAD men = 204, actual MPQAD men = 100). Recruiting efforts are underway by both Bechtel and MPQAD to achieve the necessary manpower to support Phase I activities.

The next module scheduled for completion of Phase I activities is 120J. Module 120J is located in the Auxiliary Building, Elevation 584 and contains a Unit 2 decay heat removal heat exchanger. The Resident Inspector has noted minimal inspection effort to date in Module 120J; however, a considerable amount of inspection time (63 man-weeks at 60 hours per week) is anticipated.

6. CCP Activities

Continued attention was directed toward the activities currently underway in those areas of the plant released under the Construction Completion Program (CCP). The Phase I activities monitored included the Installation Status Assessment being performed by the Bechtel Field Engineers and the Inspection Status Assessment being performed by MPQAD personnel. All personnel performing Phase I activities contacted by

the Resident Inspector were performing these activities in accordance with approved procedures and controlled documents. In addition, the Resident Inspector observed the quality verification activities associated with startup testing and operation of a service water pump.

7. FOIA Activities

In support of the FOIA request No. 84-96, the Resident Inspector's office provided all material subject to this request to the responsible parties. This effort required the Midland resident office personnel to review all onsite files for applicability to the FOIA request, pack and transport to an "offsite" location (Quality Inn, Midland) all applicable files for review by the FOIA requesting party, and to return files to the "onsite" Midland resident office at the conclusion of the review. This effort involved all Midland site resident office personnel and was accomplished over a two day period.

8. Correspondence Received

An open letter to the editor was received by Consumers Power Company and forwarded to the NRC site office. The letter was from an ex-employee and rambled on many subjects but with the basic theme that the Midland plant could be finished. The writer's statements delved in and out of Americanism, God and Country, and absolute obedience of orders. There were no accusations of wrongdoing or allegations of any kind. This item is considered closed.

9. Plant Tours

At periodic intervals during this report period, tours of essentially all site areas were performed. These tours were conducted to assess the cleanliness of site areas, 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. Current cleanliness and housekeeping practices observed during plant tours were considered by the inspectors to be adequate.

10. Exit Interview

The inspectors met with licensee representatives at the conclusion of the inspection. The inspectors summarized the scope and findings of the inspection. The licensee acknowledged the information.