

UNITED STATES NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Environmental Protection Inspection

IE Inspection Report No. 050-329/76-03
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Licensee: Consumers Power Company
212 West Michigan Avenue
Jackson, Michigan 49201

Midland Plant
Units 1 and 2
Midland, Michigan

License No. CPPR-81
License No. CPPR-82
Category: A

Type of Licensee: PWR (B&W) 2452 MWt

Type of Inspection: Routine, Announced

Date of Inspection: May 19, 1976

Principal Inspector: *J. A. Pagliaro*
B. L. Jorgensen

6/4/76
(Date)

Accompanying Inspectors: None

Other Accompanying Personnel: None

Reviewed By: *J. A. Pagliaro*
J. A. Pagliaro, Chief
Environmental and Special
Projects Section

6/4/76
(Date)

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SUMMARY OF FINDINGS

Inspection Summary

Routine initial Environmental Protection Inspection conducted on May 19, 1976, (Unit 1, 76-03) (Unit 2, 76-03): discussed the NRC Environmental Protection Inspection Program and the requirements for environmental protection specified in the Construction Permits; examined procedures, schedules, and other licensee environmental protection program documentation; examined compliance with selected environmental protection requirements of the Construction Permits; reviewed adherence to commitments for environmental protection contained in the applicant's Supplemental Environmental Report.

Enforcement Items

None.

Licensee Action on Previously Identified Enforcement Items

No previously identified enforcement items within the scope of this inspection.

Other Significant Items

A. Systems and Components

No significant items identified.

B. Facility Items (Plans and Procedures)

No significant items identified.

C. Managerial Items

No significant items identified.

D. Noncompliance Identified and Corrected by Licensee

None.

E. Deviations

None.

F. Status of Previously Reported Unresolved Items

No previously reported unresolved items within the scope of this inspection.

Management Interview

- A. The following persons attended the management interview at the conclusion of the inspection on May 19, 1976:
- T. Cooke, Project Superintendent
 - B. Peck, Field Supervisor
 - J. Reynolds, Director of Environmental Services
 - W. Strodl, Environmental Engineer, Operating Services
 - R. English, Health Physicist, Operating Services
 - J. Touma, Meteorologist
- B. Matters discussed and comments on the part of management personnel were as follows:
1. The NRC inspector discussed the NRC organization, environmental inspection program, and regulatory requirements related to environmental protection.
 2. The NRC inspector discussed the scope and intent of this specific inspection, and informed the licensee that additional inspections would be conducted prior to the commencement of plant operations. (Paragraph 2, Report Details)
 3. The inspector stated that the licensee was found to be in compliance with the existing requirements for environmental protection contained in the Construction Permit. (Paragraph 5, Report Details)
 4. The licensee stated their intent to adhere to the guidance of USNRC Regulatory Guide 1.23 in the collection of site meteorological data. (Paragraph 6, Report Details)

REPORT DETAILS

1. Persons Contacted

The following persons, in addition to those listed under the Management Interview section of the Summary of Findings, were contacted during this inspection:

D. Sibbald, Senior Construction Advisor
G. Slagel, Field Engineer

2. General

This inspection consisted of a review of the licensee's baseline nonradiological environmental monitoring program and an examination of the licensee's compliance with environmental protection requirements for construction. Environmental monitoring and environmental protection techniques, procedures, and program results were examined. management control aspects including organizational structure, delegation of responsibilities and authorities, and administrative control were also examined. The licensee's Construction Permit and Supplemental Environmental Report were used as the primary inspection criteria.

The licensee retained Dr. L. Gysel and T. Reichard, of Michigan State University to conduct a baseline ecological survey of the Midland Plant site which was completed in 1971. This nonradiological environmental survey emphasized site vegetative and wildlife communities and their interrelationships before and after commencement of construction activities.

The licensee is utilizing Bechtel of San Francisco, California, as the principal construction contractor to implement environmental protection requirements during construction.

The site meteorological monitoring program is being conducted for the licensee by EG&G of Denver, Colorado.

3. Program Management

The licensee's administrative and procedural controls for implementation of preoperational environmental monitoring and environmental protection requirements for construction were examined and discussed. This examination including a review of assignments of responsibilities and authorities for program management and implementation.

At the time of this inspection, the licensee has not prepared documentation to define program administration, assignments of responsibilities and authorities, detailed program requirements and program audits for the planned preoperational environmental monitoring programs. These programs, both radiological and nonradiological, are currently expected to commence some time in 1978 or 1979. Discussions with licensee personnel established that the licensee intends to prepared such documentation prior to commencement of the subject programs.

Administrative responsibilities within Consumers Power Company for conduct of the program for environmental protection during construction are assigned to the Project Management Organization. This assignment includes the responsibility for maintaining compliance with Construction Permit conditions and Environmental Report commitments. This program has not been documented in the form of directives or procedures, nor have provisions been made for audits and inspections of program activities. In general, compliance with program requirements or commitments has been accomplished by incorporation of these requirements or commitments in contract specifications. The licensee has extracted the environmental protection program specification into a summary listing. This listing is then referenced by senior members of the Project Management Organization on initiation of each contract or subcontract. On the completion of contract work, the appropriate requirements are again referenced to assure compliance with licensee requirements or commitments.

Responsibility for the site meteorological monitoring programs is assigned to the Project Management Organization. Routine contractor summary reporting is routed to the Project Management Organization through the company Project Services Group which has technical meteorological expertise, and which performs data review as a service to the Project Management Organization. Licensee personnel stated the meteorological contractor has been the subject of an audit by the licensee Quality Assurance organization.

4. Baseline and Construction Monitoring

The inspector reviewed reported results of the baseline ecological monitoring program. As noted above, this program was established with the objective of identifying vegetative and wildlife communities present on the site, the interrelationships between these communities, and the overall ecology before and after commencement of construction activities. Licensee personnel indicated the baseline ecological survey is expected to serve as the basis for the terrestrial portion of the preoperational nonradiological monitoring program. The inspector has no questions relating to the review of this program.

The inspector also reviewed data generated from a monitoring program pursuant to commitments related to the relocation on the site of Bullock Creek. This review established that the licensee had met or exceeded committed parameters for selected chemical and physical monitoring of water quality prior to and following Bullock Creek diversion.

5. Environmental Protection Requirements During Construction

Construction environmental protection requirements are specified in the Construction Permits. In addition, the licensee has committed to a number of other activities for protection of the environment during construction in his Supplemental Environmental Report. This inspection included discussions with licensee personnel concerning construction status, and a site tour for examination of compliance with specific requirements or commitments for which construction activities are underway or completed. Specific items examined included: modification of the cooling water intake structure design such that intake flow velocity will be less than one foot per second; relocation of the 138 kV transmission line so as to utilize the same river crossing as the 345 kV lines; sealing and grouting of site wells; construction of drop structures to minimize scouring and erosion of the site drainage system and stream beds; control of sanitary waste; protection of embankments from erosion by planting and placement of riprap protection; and various area road improvements. The licensee was found to have adhered to these conditions for the protection of the environment, contained in the Construction Permits or the Supplemental Environmental Report.

6. Meteorological Program

The licensee has established a permanent steel-framed meteorological tower on the plant site. More than one year of meteorological data has been collected utilizing this tower. Data recovery, which commenced in March, 1975, is continuing. Tower instrumentation includes monitoring for wind speed, wind direction, and dewpoint temperature at four tower height locations. (10m, 30m, 60m and 91.5m). In addition, wind and temperature variance are measured at one or more height locations. A licensee representative stated instrument locations and capabilities are in accordance with the guidance of USNRC Regulatory Guide 1.23, and that the licensee intends to adhere to the guidance of USNRC Regulatory Guide 1.23 in the continued collection of meteorological data.