

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-305/82-05 (DETP)

Docket No. 50-305

License No. DPR-43

Licensee: Wisconsin Public Service Corporation
Post Office Box 1200
Green Bay, WI 54305

Facility Name: Kewaunee Nuclear Power Plant

Inspection At: Kewaunee Site, Kewaunee, WI

Inspection Conducted: January 25-28, 1982

Inspector: R. A. Paul

D. E. Miller/for

2/22/82

Approved By: L. R. Greger, Chief
Facilities Radiation
Protection Section

D. E. Miller/for

2/22/82

Inspection Summary:

Inspection on January 25-28, 1982 (Report No. 50-305/82-05 (DETP))

Areas Inspected: Routine, unannounced inspection of actions taken in response to Health Physics Appraisal findings, status of post-TMI requirements for licensed reactors, and licensee event reports. The inspection involved 30 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

*D. Hintz, Plant Manager
*J. Richmond, Plant Services Superintendent
*M. Marchi, Technical Supervisor
*M. Reinhart, Health Physics Supervisor

R. Nelson, NRC Senior Resident Inspector
W. Fitzpatrick, NRC Resident Inspector

The inspector also interviewed other licensee and contract personnel.

*Denotes those present at the exit interview.

2. General

This inspection, which began at 12:30 p.m. on January 25, 1982, was conducted to review the status of licensee actions in response to Health Physics Appraisal findings and the status of post-TMI requirements.

3. Radiation Protection Group Staffing

Since the previous inspection, the licensee has hired a corporate health physicist; increased the Radiation Technologist staff to 11 including the Lead Technologist; created positions for three additional Radiation Technologists; and hired five permanent Radiation Helpers. (Closed 305/80-25-01 and 02)

The licensee is continuing their effort to fill the Assistant Health Physics Supervisor and university-trained health physicist positions to provide technical support at the station. (Open Item 305/80-26-01)

4. Internal Exposure Control

Since the previous inspection, the licensee has developed a program and procedures to implement service-air monitoring and had installed special fittings on color coded service-air hoses used for respirators. These actions were taken to correct the problems noted during the Health Physics Appraisal. (Closed 305/80-26-04)

5. Improved Inplant Iodine Instrumentation Under Accident Conditions

During the previous inspection, it was noted that not all persons responsible for emergency sample collection and analysis had been trained in sampling and counting procedures. This matter was found corrected during this inspection.

6. Post-Accident Sampling/Monitoring

During the Health Physics Appraisal it was noted there was no monitor on the shield building input to the containment vent, and the auxiliary building extended range monitor could be affected by radioactive material buildup on the special zone filters. The licensee has corrected these problems by installing a permanent offline monitor on the combined Containment/Shield Building Vent and by relocating and shielding the auxiliary building extended range monitor. (Closed 305/80-26-07 and 08)

7. Status of NUREG-0737 TMI Action Plan Tasks

In a letter to the Division of Licensing, dated December 28, 1981, the licensee provided alternative implementation dates for several plant modifications which would not be completed by January 1, 1982. These included: Task Item II.B.3, Post-Accident Sampling, implementation date of April 1, 1982; Task Items II.F.1 (1 and 2), High Range Noble Gas Effluents and Sampling and Analysis of Plant Effluents, implementation date of February 1, 1982; and Task Item II.F.1.3, Containment High Range Radiation Monitor, implementation date of April 1, 1982.

a. TMI Action Plan Task II.B.2 - Plant Shielding

The licensee's "Design Review of Post Accident Plant Shielding" was found in good agreement with NUREG-0737 criteria. The completion of this Task Item was conducted by special procedure between the licensee and the project contractor, formal review and approval was required by the licensee for each phase and step of the project.

The design review identified the location of vital areas, corrective actions required for access to vital area, systems containing radiation source terms, dose rate criteria, and resultant shielding or design modifications.

A review of the physical modifications was made and they appeared consistent with the related modifications described in the design review. It appears the licensee has met the intent of Task Item II.B.2.2.B.

b. TMI Action Plan Task II.B.3 - Post Accident Sampling

The licensee is installing a sampling system designed to meet the criteria outlined in NUREG-0737. Installation was approximately 95 percent complete during this inspection, and the licensee is checking out the completed portion of the system. The licensee has requested an extension until March 1, 1982, to complete the hardware modifications and develop procedures for sample collection, transfer, analysis, and provide training. When this

is accomplished, problems noted during the Health Physics Appraisal concerning location of the containment air sampling point, development of and training in health physics procedures for post-accident sampling, and the discrepancies noted in the interim procedures, will have been corrected. (Closed 305/80-26-06)

c. TMI Action Plan Task II.F.1- Noble Gas Effluent Monitor

The licensee has installed two SPING-4 extended range noble gas effluent monitors to meet the criteria in NUREG-0737. Although an extension had been requested for final implementation of the system by February 1, 1982, it was noted that the licensee would not meet this date, and was requesting another extension. In order to meet the criteria, the licensee must develop and train personnel in calibration procedures, develop procedures or calculational methods for converting instrument readings to release rates, and correct certain operating problems.

d. TMI Action Plan Task II.F.1.2 - Sampling and Analysis of Plant Effluents

The required particulate and iodine sampling is included in the two SPING-4 extended range noble gas effluent monitors discussed in Section 7.c above.

In order to meet the criteria, the licensee must purchase and install onsite laboratory capabilities to analyze the samples, and limit occupational dose to personnel during sample handling, transport, and analysis.

e. TMI Action Plan Task II.F.1.3 - Containment High Range Monitor

Installation of a high range containment monitor meeting most of NUREG-0737 requirements was completed before January 1982. The licensee has requested an extension for full implementation until after the 1982 refueling outage when an environmentally unqualified monitor cable will be replaced. Procedures incorporating calibration and special environmental qualifications are to be written before full implementation.

8. Review of Nonroutine Events

The inspector reviewed the licensee's action with respect to the radiological aspects of the following Licensee Event Reports (LERs). No items of noncompliance or deviations were identified.

LER 50-305/81-19

Failure to perform a monthly portable radiation survey instrument check.
(July 1, 1981)

LER 50-305/81-22

Boron sample from spent fuel pool obtained six days in excess of allotted time between samples.

None of the above events had significant radiological consequences.

9. Exit Interview

The inspector summarized the scope and findings of the inspection. In response to certain items discussed by the inspector, the licensee:

- a. Acknowledged the remarks concerning the review of status of TMI Action Plan Task. (Section 7)
- b. Stated they are in the process of completing the Task Items yet to be accomplished, and will request another extension for Task Item II.F.1 and 2, and possibly for Task Item II.B.3. (Section 7)