REACTOR FACILITIES BRANCH

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UNITED STATES
NUCLEAR REGULATORY COMMISSI
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

OCT 1 4 1975

Wisconsin Public Service Corporation
ATTN: Mr. E. W. James
Senior Vice President
Power Generation and
Engineering
P. O. Box 1200
Green Bay, Wisconsin 54305

Docket No. 50-305

Gentlemen:

This refers to the inspection conducted by Mr. Boyd of this office on September 4, 9, 18, 23, and 29, 1975, of activities at Kewaunee Nuclear Power Plant authorized by NRC License No. DPR-43 and to the discussion of our findings with Mr. Luoma and others of your staff at the conclusion of the inspection.

A copy of our report of this inspection is enclosed and identifies the areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, interviews with plant personnel, and observations by the inspector.

Other infractions identified through your internal audit program which were corrected in a timely manner, are listed under Other Significant Findings in the Summary of Findings section of the attached inspection report. No additional information is needed for these items at this time.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you or your contractors belisve to he proprietary, it is necessary thet you make a written applicetion to this offiice, within twenty days of your receipt of this letter, to withhold such information from public disclosure. Any such application must include a full statement of tha reasons for which it is claimed that the

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information is proprietary, and should be prepared so the proprietary information identified in the application is contained in a separate part of the document. Unless we receive an application to withhold information or are otherwise contacted within the specified time period, the written material identified in this paragraph will be placed in the Public Document Room.

No reply to this letter is necessary; however, should you have any questions concerning this inspection, we will be glad to discuss them with you.

Sincerely yours,

Gaston Fiorelli, Chief
Reactor Operations Branch

Enclosure:
IE Inspection Report
No. 050-305/75-15

bcc w/encl:
PDR
Local PDR
NSIC
TIC
J. H. Sniezek, Chief
LWRPB

UNITED STATES NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Operations Inspection
Resident Inspection Program

IE Inspection Report No. 050-305/75-15

Licensee: Wisconsin Public Service Corporation
Power Generation and Engineering
P. O. Box 1200
Green Bay, Wisconsin 54305

Kewaunee Nuclear Plant
Kewaunee, Wisconsin

License No. DPR-43
Category: C

Type of Licensee: PWR W 1650 MWt

Type of Inspection: Routine, Unannounced

Dates of Inspection: September 4, 9, 18, 23 and 29, 1975

Principal Inspector: D. C. Boyd — 10/10/75 (Date)

Accompanying Inspector: E. L. Jordan

Other Accompanying Personnel: R. Hall
September 18, 1975
(Only)

Reviewed By: E. L. Jordan — 10/10/75 (Date)
Senior Inspector
Unit 2 Projects Section
Reactor Operations Branch

SUMMARY OF FINDINGS

Inspection Summary

Inspection on September 4, 9, 18, 23 and 29, (75-15): Observations in the control room and other portions of plant; review of plant operations; review of abnormal occurrences; review of portions of plant quality assurance program; review of onsite review committee charter and functions; review of plant record retention functions.

Enforcement Items

None.

Licensee Action on Previously Identified Enforcement Items

None.

Other Significant Items

A. Systems and Components

1. The "A" main feedwater pump failed (first failure) in a manner similar to the several (four) previous failures of the "B" main feedwater pump. (Cracked pump casings; broken diaphram bolts). The "A" main feedwater pump has been repaired and modified in the same manner as has been found to be satisfactory for the "B" main feed pump and has been returned to service. Some increase in feedwater system vibrations has resulted, and this is being closely monitored and evaluated by the licensee.

2. Top priority has been given to resolving the related problems of limitorque switch mal-operation and thermal overload switch operation. Vendor representatives, plant and corporate personnel are identifying and implementing the necessary actions for the correction of these problems. (Paragraph 4.b, Report Details)

B. Facility Items

The plant is currently operating at essentially full power.

C. Managerial Items

None.

D. Noncompliance Identified by the Licensee

1. Failure to meet limiting conditions for operation while one diesel generator was out of service August 27, 1975. (Paragraph 4.a, Report Details)

2. Incomplete performance of monthly surveillance test, September 10, 1975. (Paragraph 4.d, Report Details)

3. Momentary breach in special ventilation zone containment integrity September 12, 1975. (Paragraph 4.c, Report Details)

E. Deviations

None.

F. Status of Previously Identified Unresolved Items

None.

Management Interview

A management interview was conducted on September 29, 1975, with Messrs. Luoma, Plant Superintendent; and Lange, Assistant to the Superintendent, Maintenance.

The items discussed included the following:

A. Resident inspector activities. (Paragraph 3, Report Details)

B. Unusual events. (Paragraph 4.a through 4.d, Report Details)

C. Limitorque valve thermal overload problem. (Paragraph 4.b, Report Details)

REPORT DETAILS

1. Persons Contacted

C. Luoma, Plant Superintendent
R. Lange, Assistant Superintendent, Maintenance
J. Ruege, Plant Performance Engineer
K. Evers, Reactor Supervisor
T. Moore, Administrative Assistant
D. McSwain, I&C Supervisor
L. Arno, Lead I&C Man
D. Ristau, Training Supervisor
D. Braun, Shift Supervisor
C. Steinhardt, Assistant Superintendent, Operations
W. Truttmann, Operations Supervisor.

2. General

Reports issued under the Resident Inspector Program address areas of inspection completed in the implementation of the program and will not be reported on in detail unless the findings warrant further discussion.

3. Inspection Activities

a. Observations in control room.

b. Inspection tours of auxiliary and turbine buildings.

c. Abnormal Occurrence closure and review. (Paragraph 4.a and 4.d, Report Details)

d. Review of plant operations.

e. Review of portions of plant quality assurance program.

f. Review of onsite review committee charter and functions.

g. Review of plant record retention practices.

h. Resident inspector program review with plant management by IE-III and Headquarters personnel.

4. Unusual Events

a. Failure to Meet Limiting Condition for Operation

On August 27, 1975, the licensee reported that a damper in the special ventilation system had failed in the open

position (would have performed it's design function) and was taken out of service for inspection and repair. Later during the day, while the above component was still out of service, the "B" diesel generator was taken out of service to facilitate maintenance activities (not related to the special ventilation damper or to the "B" diesel) to be performed in an area immediately above the diesel generator.

A routine audit of plant status by staff personnel identified that a limiting condition for operation, as identified in Technical Specification 3.7.b.2, was violated, i.e., "one diesel may be inoperable . . . . provided that the other diesel generator is tested daily . . . . and the engineered safety features associated with that diesel are operable." Thus, one diesel was inoperable and an engineered safety feature component whose emergency backup power supply was from the operable diesel, was out of service. The "B" diesel was immediately returned to service. The problem with the special ventilation zone damper was determined to be a blown fuse.

The licensee reported the above to the Nuclear Regulatory Commission by telephone and telegraph on August 27 and 28, 1975, respectively, and by letter on September 5, 1975.

b. Inoperable Cooling Water Valves in Engineered Safety Feature System

On September 3, 1975, the licensee reported that two motor operated (limitorque) valves supplying service water (cooling water) to containment fan coil units 1A and 1C would not open. Investigation by the licensee revealed that in both instances the valve motor thermal overloads were open. Further investigation revealed the presence of grease in the belleville spring which prevented proper spring compression and subsequent torque switch operation.

The inspector's review indicates that this is the second such failure on these valves (AO 75/14) and that there have been five similar failures in other systems within the past year. Records and discussions indicate that the licensee is actively pursuing the following program to correct the above problem area:

1. The vendor has been contacted and a vendor representative has been at the plant to review the problem, inspect the valves, and to recommend proper corrective actions.

2. Several grease pressure relief kits have been ordered. A portion of the limitorque switch mal-operation is believed to be due to excessive grease in the belleville spring area resulting in the inability to compress the spring properly. The kit provides a pressure relief capability. The kits will be used to modify the most failure prone valves, i.e., those having the manual operators modified on the bottom.

3. Special procedures for limitorque switch adjustments and thermal overload sizing are in final draft status.

4. Circuitry modifications are being evaluated which will provide control room indication of loss of power to the motors if either the thermal overloads or the limitorque switches open.

c. Failure to Maintain Special Ventilation Containment Integrity

On September 11, 1975, the licensee reported[1/] that a staff member had found both doors of the shield building airlock open. This personnel error was corrected and all personnel were reinstructed on the proper operation of these airlock doors.

d. Incomplete Surveillance Testing

On September 10, 1975, the licensee reported that an audit of their surveillance testing data revealed that the monthly testing of the boric acid tank level transfer function had been completed on the "B" tank but not on the "A" tank.

The inspectors review indicates that the "A" tank level transmitters were found to be in need of modification, thus the "A" tank was drained, the transmitters removed and the modifications begun. A delay in completion of this modification resulted from the vendor's failure to provide replacement bellows for the transmitters as scheduled. (The vendor quality assurance rejected the bellows.)

1/ Ltr, to B Rusche from E. James, 9/19/75.

The licensee issued a deviation report which flagged the test for completion prior to the expiration of the acceptable time period. However, this was overlooked until identified by the audit, after the time period had expired. The required testing has subsequently been completed.