

*Reacta Facilities
Branch*

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

FEB 24 1976

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. D. C. Boyd of this office on January 12, 14, 20, 23, 28 and 30, 1976, of activities at Kewaunee Nuclear Power Plant authorized by NRC License No. DPR-43 and to the discussion of our findings with Mr. Lange at the conclusion of the inspection.

The enclosed copy of our inspection report identifies areas examined during the inspection. Within these areas, the inspection consisted of a selective examination of procedures and representative records, observations, and interviews with personnel.

No items of noncompliance with NRC requirements were identified within the scope of this inspection.

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, except as follows. If this report contains information that you or your contractors believe to be proprietary, you must apply in writing to this office, within twenty days of your receipt of this letter, to withhold such information from public disclosure. The application must include a full statement of the reasons for which the information is considered proprietary, and should be prepared so that proprietary information identified in the application is contained in an enclosure to the application.

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Wisconsin Public Service
Corporation

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APR 4 1976

We will gladly discuss any questions you have concerning this inspection.

Sincerely yours,

Gaston Fiorelli, Chief
Reactor Operations and
Nuclear Support Branch

Enclosure:
IE Inspection Rpt No. 050-305/76-01

cc w/encl:
C. Luoma, Plant
Superintendent

bcc w/encl:
PDR
Local PDR
NSIC
TIC
J. S. Snizek, IE:HO
HQ Reproduction

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

REGION III

Report of Operations Inspection

Resident Inspection Program

IE Inspection Report No. 050-305/76-01

Licensee: Wisconsin Public Service Corporation
P. O. Box 1200
Green Bay, Wisconsin 54305

Kewaunee Nuclear Power Plant
Kewaunee, Wisconsin

License No. DPR-43
Category: C

Type of Licensee: PWR W 1650 Mwt

Type of Inspection: Routine, Unannounced

Dates of Inspection: January 12, 14, 20, 23, 28, and 30, 1976

Principal Inspector:

E. L. Jordan
D. C. Boyd

2/23/76
(Date)

Accompanying Inspectors: None

Other Accompanying Personnel: None

Reviewed By:

E. L. Jordan
E. L. Jordan, Chief
Reactor Projects Section No. 2

2/23/76
(Date)

SUMMARY OF FINDINGS

Inspection Summary

Inspections on January 12, 14, 20, 23, 28 and 30, (76-01):
Observations in the Control Room, Turbine Building and Auxiliary Building; review of plant operations, of reportable events, management practices and directives; plant retraining activities and records; preparations for unit refueling; procedure update, review and approval; and a possible generic problem in core baffle.

Enforcement Items

None.

Licensee Action on Previously Identified Enforcement Items

None.

Other Significant Items

A. Systems and Components

1. A fault in a section of the aluminum reserve auxiliary bus, on a section between joints, resulted in an undervoltage trip of the unit of January 23, 1976.
2. Partial freeze-up of the intake line to the recirculation system forebay forced the unit to shutdown on January 14, 1976.

B. Facility Items (Plans and Procedures)

1. The plant is currently operating at essentially full power with no operational problems.
2. The major staff activity is the final planning and scheduling for the units first refueling outage. The first refueling outage is scheduled to begin on February 15, 1976, and will last for approximately ten weeks.

C. Managerial Items

None.

D. Noncompliance Items Identified by the Licensee

None.

E. Deviations

None.

F. Status of Previously Identified Unresolved Items

None.

Management Interview

A management interview was conducted on January 30, 1976, with Messrs. Lange, Assistant to the Superintendent, Maintenance; and Steinhardt, Assistant to the Superintendent, Operations.

Items discussed include the following:

- A. Resident Inspector activities. (Paragraph 3, Report Details)
- B. Unusual Events. (Paragraphs 4.a and 4.b, Report Details)
- C. Training Program. (Paragraph 6, Report Details)
- D. Procedures Review, Update, Approval. (Paragraph 7, Report Details)
- E. Possible Generic Problem in Core Baffle. (Paragraph 5, 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
J. Jarvela, H. P. Supervisor
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. Observation in control room.
- b. Inspection tours of auxiliary and turbine buildings. .
- c. Reportable Event closure and review. (Paragraphs 4.a and 4.b, Report Details)
- d. Review of plant operations.
- e. Review of procedures review, update, and approval.
- f. Review of plant retraining activities. (attended three hour H. P. Refresher Course)
- g. Review of preparations for refueling.
- h. Review of possible generic problem. (Paragraph 5)

4. Unusual Events

- a. On January 6, 1976, while performing a monthly surveillance test on the containment pressure instrumentation, the pressure transmitter supplying channel 949 was found to have a 6.25 percent zero shift in the low direction.

The inspector's review of this event establishes that while channel 949 was declared inoperable it was still capable of providing its trip functions, however, these would have occurred at higher containment pressures. Neither the minimum number of operable channels required for the containment Hi-pressure safeguards actuation (2) nor the Hi-Hi pressure spray actuation (1 of each set of 2) were exceeded. The five remaining channels of containment pressure instrumentation were found to be correctly calibrated. Channel 949 was recalibrated and returned to service. The cause for the calibration drift is not known.

- b. On January 8, 1976 while performing a monthly test on the safety injection pumps valve S.I.-2B, one of two valves in parallel providing suction to the safety injection pumps, failed to open.

The inspector's review of this event establishes that the cause of this failure was a loose set screw which holds the trip lever in position on the clutch lever shaft. This allowed the clutch lever to disengage from the motor worm gear and prevent electrical operation of the valve. The set screw was tightened and the valve, S.I.-2B, was functionally tested to verify proper operability.

The licensee randomly selected 15 other similar limitorque motor operated valves for examination. No other discrepancies were discovered.

5. Possible Generic Problem - Core Baffle

The licensee has been advised by the plant designer of a possible problem at specified core baffle positions. These positions are the corner joints of the four major (three element wide) baffle plates. The plant designer advises that a possibility exists for excessive flow through these joints which could result in fuel rod vibration and subsequent fretting damage to the fuel rod cladding.

The licensee has stated their intent to perform a full inspection of all elements in these suspect core positions during the February-April, 1976 refueling outage.*

Possible corrective actions are being deliberated by the licensee and the plant designer.

*As a note of interest Point Beach Unit 2 is of similar design and plant management has stated their intent to perform a full inspection of all elements in these suspect core positions during the March-April 1976 refueling outage.

6. Operator Training and Regualification Program

The inspector reviewed the licensee's operator training and regualification program to verify that the licensee is implementing a program which assures that all licensed operators attain and maintain the necessary proficiency to operate the plant safely and within the requirements of the facility technical specifications. While no areas of regulatory concern were identified, a summary of this review is included for record purposes.

The principal documents against which the licensee was examined include the following:

- a. The April 15, 1975 commitment to Licensing, Kewaunee Operator Regualification Program.
- b. 10 CFR 55, Appendix A - Regualification Programs for Licensed Operators of Production and Utilization Facilities.
- c. Administrative Control Directives;
 - 13.1 - Training Records
 - 13.2 - Fire Brigade Training
 - 13.3 - Operator Training
 - 13.4 - Emergency Plan Training
 - 13.5 - Security Training

7. Procedure Review

The inspector reviewed the licensee's actions and programs for assuring that the required safety related plant operating and maintenance procedures exist, are being maintained in a current status, and are being implemented. While no areas of major regulatory concern were identified, a summary of this review is included for record purposes.

The principal documents against which the licensee was examined include the following:

- a. American National Standards Institute, N 18.7-1972--
Administrative Controls for Nuclear Power Plants.
- b. Facility Technical Specifications.

c. Regulatory Guide 1.33, Appendix A -- typical procedures for pressurized water reactors.

d. Administrative Control Directives:

1. 2.6 -- Plant Procedures.
2. 4.2 -- Operating Procedures.
3. 5.2 -- Maintenance Procedures.
4. 7.3 -- I & C Procedures.
5. 8.6 -- Surveillance Procedures.
6. 12.1 through 12.8 -- Plant Emergency Procedures.
7. Plant Operating Review Committee.