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

CENTRAL FILES

SEP 27 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. 050-305

Gentlemen:

This refers to the inspection conducted by Mr. D. Boyd of this office on May 24, 26; June 18, 23, 25; July 1-2; August 11-12 and September 1-3, 1976, of activities at Kewaunee Nuclear Plant authorized by Operating License Number DPR-43 and to the discussion of our findings with Messrs. Luoma and 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.

Noncompliance identified through your management control system and corrected in a timely manner is described under Other Significant Items in the Summary of Findings section of the attached inspection report. We have no further questions regarding this matter 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, 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.

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.
050-305/76-12

cc w/encl:
Mr. C. Luoma, Plant
Superintendent

bcc w/encl:
Central Files
Reproduction Unit NRC 20b
PDR
Local PDR
NSIC
TIC

UNITED STATES NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report of Operations Inspection
Resident Inspection Program

IE Inspection Report No. 050-305/76-12

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: May 24, 26; June 18, 23, 25; July 1-2; August 11-12, and September 1-3, 1976

Principal Inspector: D. C. Boyd — 9-24-76 (Date)

Accompanying Personnel: D. Hunter - July 1-2 and September 1-3, 1976 (only) — D C Boyd for — 9-24-76 (Date)

E. Jordan - August 11, 1976 (only) — E L Jordan — 9/24/76 (Date)

Other Accompanying Personnel: D. Neighbors - Licensing Project Manager - September 2, 1976 (only)

R. Hall - August 11, 1976 (only)

E. Blackwell - August 11, 1976 (only)

Reviewed By: Gaston Fiorelli, Chief Reactor Operations and Nuclear Support Branch — R C Knop for — 9/24/76 (Date)

SUMMARY OF FINDINGS

Inspection Summary

Inspections on May 24, 26; June 18, 23, 25; July 1, 2; August 11, 12; and September 1-3, 1976. (Announced inspections on July 1, 2 and August 11, 1976) (76-12): Review of safety limits; limiting safety systems; limiting conditions of operations; review of plant operations; review of licensee event reports; review of changes to licensee Quality Assurance program; review of licensee organization and administration; and observation of plant operations.

Enforcement Items

None.

Licensee Actions on Previously Identified Enforcement Items

None.

Other Significant Items

A. Systems and Components

No problems.

B. Facility Items

The plant is operating at essentially full power with no operational problems.

C. Managerial Items

None.

D. Noncompliance Identified and Corrected by Licensee

1. Contrary to Technical Specification 3.1.d.4, air and particulate monitors R-11 and R-12, and backup monitor R-21, were out of service for a period of time longer than allowable. (Paragraph 4.d, Report Details)

2. Contrary to Technical Specification 4.4.e.2, special ventilation Train "B" was taken out of service prior to testing special ventilation Train "A" to verify operability. (Paragraph 4.e, Report Details)

3. Contrary to Technical Specificaton 2.3.a.4.B, the reactor coolant pump motor breaker open low voltage setpoint (undervoltage setpoint) was set at less than 75%. (Paragraph 4.c, Report Details)

E. Deviations

None.

F. Status of Previously Reported Unresolved Items

None.

Management Interview

A management interview was conducted on September 3, 1976, with Messrs. Luoma and Lange. The items discussed included the following:

A. The inspector informed the licensee that this inspection would be the final inspection conducted under the pilot Resident Inspection Program which was initiated in June of 1974. The licensee was informed that Dorwin Hunter would now become the principal inspector and that he would work out of the Region III office.

B. The inspectors voiced a concern that there appeared to be a weakening in plant personnel adherence to established procedures. This failure to follow established procedures had resulted in two recent instances of Technical Specifications violations. The licensee acknowledged the comment and indicated proper corrective action through reinstruction of personnel had already been initiated. (Paragraphs 4.a thru e., Report Details)

C. The inspectors pointed out that in several instances the licensee event reports have not provided sufficient detail on actions taken to prevent a recurrence of the event. The licensee acknowledged the comment and stated that this matter would be discussed further at the corporate level for resolution.

D. The inspector discussed the inspection activities and findings during this reporting interval.

E. The inspector stated that a review of the plant organization revealed no discrepancies, but the job descriptions below the supervisory level had not been formally entered into the Administrative Procedures.

The licensee stated that the job descriptions were being formalized and reviewed for presentation to corporate management in January of 1977, and at that time the Administrative Procedures would be revised. (Paragraph 8, Report Details)

REPORT DETAILS

1. Persons Contacted

C. Luoma, Plant Superintendent
R. Lange, Assistant to the Superintendent, Maintenance
C. Stienhardt, Assistant to the Superintendent, Operations
W. Truttmann, Operations Supervisor
J. Ruege, Plant Performance Engineer
R. Stitzman, Maintenance Coordinator
K. Evers, Reactor Supervisor
R. Hirst, Maintenance Supervisor
D. McSwain, Instrument and Control Supervisor
J. Jarvella, Health Physics Supervisor
J. Richmond, Technical Supervisor
D. Ristau, Training Supervisor
V. LeGreve, QA Technician
D. Berg, QA Technician
F. Stanaszak, Shift Supervisor
G. Fitzpatrick, Corporate Quality Assurance
L. Arno, Assistant Instrument and Control Supervisor
T. Moore, Administrative Assistant

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 the control room, turbine and auxiliary buildings.

b. Reportable occurrence review and closure. (Paragraphs 4.a thru 4.e, Report Details)

c. Review of limiting safety system settings and limiting conditions for operation. (Paragraph 5, Report Details)

d. Review of plant operations. (Paragraph 6, Report Details)

e. Review of changes to the plant Quality Assurance program. (Paragraph 7, Report Details)

f. Review of plant organization and administration. (Paragraph 8, Report Details)

4. Reportable Occurrences

The following reportable occurrences took place during this reporting interval and all were reviewed by the inspector. The inspector's review established that proper corrective actions were taken and the events were properly recorded and reported.

a. RO 76-10: On April 15, 1976, a turbine trip, reactor trip from the SCOTS single channel overspeed trip system. After it was verified that the trip was spurious, the SCOTS was bypassed and the reactor returned to operation. Subsequent checking revealed that a probe on the SCOTS power supply pickup card was not making good contact, thus, resulting in spurious signals.

The inspector's review verified that two other turbine overspeed protection systems were operable at the time of the reactor restart, thus, meeting the requirements of Technical Specifications Table 3.5-2, item 11.

b. RO 76-11: On April 19, 1976, during a refueling outage, a Management Audit of surveillance test data revealed that the undervoltage trip setting on Bus 1-1A phase had drifted to a value less conservative than allowed by the Technical Specifications. The cause was an inadequate surveillance procedure in which the licensee was attempting to set the trip point precisely on the Technical Specifications limit. Thus, any drift in the nonconservative direction resulted in a violation of the Technical Specifications.

The inspector's review indicates that the initial corrective action taken by the licensee was to recalibrate the instrument, as had been done in the past, and to initiate a design change to set the trip point more conservatively than required by the Technical Specifications. This design change was not implemented prior to restart following the refueling outage.

c. RO 76-12: On June 1, 1976, during reactor operation, a management review of calibration data revealed that the undervoltage trip setting for Bus 1-1A had been set at a value lower than allowed by the facility Technical Specifications. The causes for this event were twofold;

first, the design change mentioned in item 4.b., above, had been delayed administratively and thus, had not been implemented during the refueling outage as intended; and secondly, the surveillance procedure acceptance criteria was too broad and allowed the Technician performing the surveillance to set the trip point at or slightly below the Technical Specifications limit. (Setpoint stated in milli-amps.)

The inspector verified that proper corrective actions have been taken. These include the completion of the design change mentioned in item 4.b., above, and completion of the necessary procedural changes to assure that the trip settings are set within the requirements of the Technical Specifications. This item is considered to be closed.

d. RO 76-13: On July 15, 1976, following the repair and return to service of containment particulate and radio gas monitors R-11 and R-12, the backup monitor R-21 was removed from service for preventative maintenance. Approximately 19 hours later it was discovered that the isolation valves for monitors R-11 and R-12 had not been reopened, thus, the monitoring, recording and operability requirements of Technical Specification 3.9.b.4 were not met. The cause for this event was human error in that the operator did not completely return the system to an operable status as was requested by supervision.

The inspector's review indicates that the licensee did issue a Work Request (45-4149) to perform this work and did utilize a tag-out procedure (No. 649) to take the equipment out of service.

During the period of repair to the R-11, R-12 pump coupling the backup monitor R-21 was in service.

The error was discovered when the Health Physics Group attempted to obtain a containment air sample for routine analysis and found that there was no flow in the sample line. It was then determined that the isolation valves on monitors R-11 and R-12 were closed.

The corrective action taken by the licensee was to reinstruct operations personnel on the necessity for fully implementing return to service instruction and for providing an independent assurance of operability following maintenance on safety related equipment. This item is considered to be closed.

e. RO-76-14: On July 16, 1976, a Plant Electrician performing maintenance on a circuit breaker in Special Ventilation System Train "B" failed to clear this activity through the Shift Supervisor before taking Train "B" out of service. This violated Technical Specification 4.4.e.2 in that Special Ventilation Train "A" was not tested to verify its operability prior to taking Train "B" out of service.

The inspector's review indicates that a Work Request for this activity had been properly authorized on the previous day. At that time the operability of Train "B" had been demonstrated prior to working on the Train "A" breaker. Train "A" operability had also been demonstrated following this preventative maintenance work on the breaker. Time did not permit completion of the work authorized on the work permit, i.e., perform the preventative maintenance checkout of the "B" train breaker, thus, the Plant Electrician elected to complete this work the next day. The next day the Plant Electrician forgot to reinstate the work request prior to initiating the work.

The corrective action taken by the licensee was to reinstruct personnel on the necessity for adherence to established procedures. This item is considered to be closed.

5. Review of Limiting Safety System Settings and Limiting Conditions of Operation

Site inspections were made on May 24; June 18, 23, and 25, 1976, to determine the licensee's conformance with Technical Specifications requirements for safety limits, limiting safety system settings and limiting conditions for operations. Documents reviewed included the following:

a. Control Room Log, Shift Supervisor Log, Computer Log Sheets 1 and 2 for May 1, 1976, through June 16, 1976.

b. Surveillance test records for the following: reactor coolant system; reactivity and power control systems; containment system; power conversion and auxiliary systems; emergency cooling systems; accumulator system, diesel generator system; and other safety related electrical systems. Records for June 1, 1976, through May 25, 1976, were reviewed.

c. Volume IV of the Kewaunee Incident Report File for 1976.

d. Maintenance Work Request and Design Change files for 1976.

No items of Regulatory concern were identified.

6. Review of Plant Operations

Site inspections were made on May 24, June 18, 23 and 25, 1976, to observe and review plant operations.

To determine that the plant was being operated in conformance with established requirements, documents reviewed included the following: Auxiliary Building Logs, Turbine Building Logs, Control Room and Shift Supervisor Logs, Computer Logs 1 and 2, Sequence of Events Log, Operations Orders, Deviation Report File, Plant Incident File, Maintenance Work Request and Modifications Files. The above records were reviewed for May 1976 through June 25, 1976. No items of Regulatory concern were identified.

On June 18, 1976, a review was made to verify compliance with the Technical Specifications requirements regarding the primary coolant quality. The inspector's review included reactor coolant sample analysis for Gross Beta, Gross Gamma, Tritium, Fluoride, Chloride, Oxygen and Boron Concentration; and secondary coolant sample analysis for Gross Beta, Gross Gamma, and Iodine-131. These records were compared against previous data (previous fuel cycle). No items of Regulatory concern were identified.

7. Review of Changes to Plant Quality Assurance Program

On June 25, 1976, an inspection was made to determine whether changes made to the licensee's Quality Assurance program are in conformance with the QA program described in the application, and whether the personnel responsible for implementing the QA program are familiar with the changes or revisions.

The inspection revealed that no major program changes have been made in the past year. Minor changes, such as the addition of a Quality Assurance Technician and minor procedural changes are reflected in Administrative Control Directive 9.1, and in Section 6 of the facility Technical Specifications. Discussions with site and corporate members of the Quality Assurance Organization verify that they are familiar with these changes to the program.

8. Organization and Administration

The inspector reviewed the licensee onsite organization for conformance with the Technical Specifications and Administrative Procedures. The review included the organizational structures; personnel qualifications; personnel authorities and responsibilities; minimum shift crew and licensed personnel requirements; onsite safety committee membership and qualifications; and organizational changes.

No discrepancies were noted.