



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30323

Report Nos.: 50-369/86-05 and 50-370/86-05

Licensee: Duke Power Company
422 South Church Street
Charlotte, NC 28242

Docket Nos.: 50-369 and 50-370

License Nos.: NPF-9 and NPF-17

Facility Name: McGuire 1 and 2

Inspection Conducted: February 3 - 7, 1986

Inspector: E. H. Girard 3/3/86
E. H. Girard Date Signed

Approved by: J. J. Blake 3/4/86
J. J. Blake, Section Chief Date Signed
Engineering Branch
Division of Reactor Safety

SUMMARY

Scope: This routine, announced inspection entailed 31 inspector-hours on site in the areas of training of personnel responsible for pump and valve maintenance and performance testing and review of pump and valve test procedures and test records.

Results: One violation was identified - Valve position indicator verification, paragraph 6.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *T. L. McConnell, Station Manager
- *D. J. Rains, Superintendent of Maintenance
- R. A. Johansen, Performance Engineer
- *D. S. Marquis, Performance Engineer
- *D. Mendezoff, Engineer Specialist
- D. N. Smith, Performance Technician
- R. E. Nix, Senior Instructor (Mechanical Maintenance)
- L. Wright, Technical Specialist, Training and Safety
- R. L. Wilson, Senior Instructor (Engineer/Professional)
- G. M. Baccich, Associate Instructor (Engineer/Professional)
- J. D. Wylie, Director of Production Technology Training

NRC Resident Inspectors

- *W. T. Orders, Senior Resident Inspector
- *R. C. Pierson, Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on February 7, 1986, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee. At the time of the exit interview, the licensee had not had an opportunity to review the conditions identified in the below listed violation. The licensee confirmed the condition to NRC Region II in a telephone call later the same day.

Violation 369, 370/86-05-01, Valve position indicator verification, paragraph 6.

The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Training of Personnel Responsible for Pump and Valve Maintenance and Performance Testing - Units 1 and 2 (41700)

The inspector reviewed selected examples of the lesson outlines and associated materials used by the licensee in providing training to personnel responsible for pump and valve maintenance and performance testing. The inspector reviewed the lesson outlines and training materials for technical adequacy and accuracy. The lesson outline examples reviewed by the inspector were as follows:

- Engineering Professional Program
 - Lesson E/P-TC-AEP-PTA-01 (3/18/85), Pump Theory and Systems Applications
 - Lesson E/P-TC-AEP-PTA-02 (3/21/85); Codes, Standards and IWP Testing
- Mechanical Maintenance Program
 - Lesson MM-BM-FA-01 (4/30/80), Fasteners
 - Lesson MM-BM-FA-02 (3/85), Torquing and Tensioning Tools
 - Lesson MM-TC-FSS-VMA-01 (4/82), Basic Valve Maintenance
 - Lesson MM-TC-FSS-PUA-01 (10/84), Basic Pump Maintenance
- Nuclear Performance Technician Program
 - Lesson PFF-TC-FP-PR-09 (12/22/83), Valve Testing
- Instrumentation and Electrical Maintenance Program
 - Lesson IE-BE-MM-02 (9/1/83), Temperature Measurement Methods
 - Lesson IE-BE-MM-03 (8/22/83), Pressure Measurement
 - Lesson IE-BE-MM-05 (9/83), Flow Measurement

With regard to the licensee's training, the NRC inspector asked the licensee if they had submitted their training program "Self Evaluation Report for Technical Staff and Managers" to the Institute for Nuclear Power Operations (INPO) and if they had subsequently received accreditation from INPO. The licensee's Training and Safety Technical Specialist informed the inspector the report had been submitted to INPO in December 1985, but that INPO had not performed their site audit of the program or granted accreditation.

Within the areas examined, no violations or deviations were identified.

6. Review of Pump and Valve Test Procedures and Records - Units 1 and 2 (61700)

The inspector examined selected examples of the licensee's pump and valve test procedures and associated test records to verify the licensee's compliance with Technical Specifications (TSs) 4.0.3, 4.0.4, 4.0.5, and 4.4.6.2.2.a. Technical Specification 4.0.5 specifies compliance with

inservice testing requirements of ASME Section XI. The pump and valve test procedures and records reviewed by the inspector were as follows:

- ASME Section XI, Subsection IWP testing of Unit 1 Residual Heat Removal (RHR) Pump 1A
 - ° Procedure: PT/1/A/4204/01A with changes through 25
 - ° Records: Tests completed 7/84, 9/84, 12/84, 3/85, 5/85, 8/85 and 11/85
- ASME Section XI, Subsection IWV and TS 4.4.6.2.2a testing of Unit 2 RHR System pressure isolation valve 2ND1B
 - ° Procedure: PT/2/A/4200/08B with changes through 8
 - ° Records: Tests completed 4/19/83, 12/24/83 and 4/30/85.
- ASME Section XI, Subsection IWV testing of Unit 1 Safety Injection System Valves 1NI185A and 1NI184B
 - ° Procedure: PT/1/A/4200/22 with changes through 8
 - ° Records: Tests completed 3/81, 11/82, 3/84 and 5/85

In reviewing procedures and records for ASME Code Class 2 valves 1NI185A and 1NI184B, the inspector found no evidence that these valves had been tested to verify their remote position indicators accurately reflected valve operation. This (surveillance) testing is required to be performed at least every two years by ASME Section XI.

Units 1 and 2 have been in operation more than two years. In response to the NRC inspector's questioning, the licensee confirmed that the ASME Section XI position indicator verification inservice testing had not been performed for the subject valves on either Unit 1 or 2. Technical Specification 4.0.5 specifies that the inservice testing of ASME Section XI shall be performed as Surveillance Requirements. Technical Specifications 4.0.3 and 4.0.4 specify that failure to perform Surveillance Requirements within the specified time interval constitutes a failure to meet Operability requirements for a Limiting Condition for Operation and that the Operational Mode shall not be entered until the Surveillance Requirements have been performed.

The licensee entered the Operational Mode for both units without performing the position indicator testing Surveillance Requirements. Thus, the licensee failed to comply with the Technical Specification 4.0.5 requirement to perform the testing at least every two years and with the TSs 4.0.3 and 4.0.4 requirement to not to enter the Operational Mode until the testing was performed. This noncompliance with TSs 4.0.3, 4.0.4 and 4.0.5 is identified as violation 369/370/86-05-01, Valve Position Indicator Verification. In a telephone conversation from the NRC Senior Resident Inspector on February 10, 1986, the inspector was informed that the required testing of the Unit 1 and Unit 2 valves had been completed and that, although one valve did not reseal properly in testing and had to be repaired, the condition of

the valves during the previous plant operational period was determined to have been adequate to meet their safety function.

One violation was identified in the area examined as described above.