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

Report Nos.: 50-369/85-24 and 50-370/85-25

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: July 8-12, 1985

Inspector: _____ 7-30-85
K. W. Van Dyne Date Signed

Approved by: _____ 7-30-85
for F. Jape, Section Chief Date Signed
Engineering Branch
Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection involved 35 inspector-hours on site in the areas of design changes and modifications, surveillance testing, and review of previous enforcement matters and inspector followup items.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee employees

*A. F. Batts, Quality Assurance
W. T. Bilger, Performance Analysis
*B. Hamilton, Superintendent of Technical Services
*M. K. Kelly, Technical Associate
J. Lukowski, Performance Analysis
D. Marquis, Performance Engineer
*D. Mendezoff, Engineering Specialist
*D. Motes, Support Engineer
*D. J. Rains, Superintendent of Maintenance
*R. P. Ruth, Quality Assurance
*B. Travis, Superintendent of Integrated Scheduling

Other licensee employees contacted included engineers, technicians, and office personnel.

Other Organization

Westinghouse
W. G. Lyman, Fluid Systems
J. C. Weber, IAE

NRC Resident Inspectors

W. Orders
*R. Pierson

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 12, 1985, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings listed below. No dissenting comments were received from the licensee.

a. Inspector Followup Item 370/85-25-01, Determination of Unit 2 ΔT Decrease, paragraph 6.

b. Inspector Followup Item 369/85-25-01 and 370/85-25-02, Adequacy of Review of Completed Test Results, paragraph 8.

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

(Closed) Deviation 370/85-07-01. Failure to provide procedures for core unloading and reloading, and annunciator or computer alarm to prescribe operator actions as stated in the November 21, 1984, response to IEB 84-03. The inspector verified that the core unloading and reloading procedures for Unit 1 and Unit 2 specify operator actions to be taken in the event of decreasing water level in either the refueling cavity or the spent fuel pool. In addition, the inspector reviewed AP/1/A/5500/40 and AP/2/A/5500/40, Loss of Refueling Canal Water Level for Unit 1 and Unit 2, respectively. These annunciator procedures serve as response procedures to guide the operator in mitigating the consequences of decreasing water level during refueling operations. This item is closed.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in paragraph 8.

5. Followup on Previously Identified Inspection Findings (92701)

(Closed) Inspector Followup Item 370/85-07-02, Westinghouse determination to repair or replace the control rods which were dropped during the breech guide screw inspection. The inspector reviewed a McGuire Nuclear Station memorandum written by Nuclear Mechanical Maintenance on March 25, 1985. the memorandum states that two drive rods in locations D-14 and B-8 were dropped approximately 4-5 feet when they slipped from the unlatching tool. These two drive rods were replaced with spares from Catawba. This item is closed. In addition, this closes LER 84-32.

6. Operational Safety Verification (71707), Unit 2

At the inspector's request, a meeting concerning a decrease in Unit 2 primary ΔT was held July 9, 1935, with on-site Westinghouse representatives and McGuire Nuclear Station (MNS) personnel. Since May 1985, the primary coolant temperature change across the core has been decreasing at approximately 0.5°F per month. The purpose of the meeting was to discuss the most probable theories for the ΔT decrease. Licensee personnel stated that insufficient information exists to adequately determine the cause. Investigation into the matter continues since more data need to be collected and analyzed from both the secondary and primary sides of the plant to properly evaluate the cause for the primary T decrease. This item will be identified as inspector followup item 370/85-25-01, Determination of Unit 2 ΔT Decrease.

No violations or deviations were identified in the areas inspected.

7. Design Changes and Modifications (37700), Unit 1

The McGuire Nuclear Station Modification (NSM) Manual specifies requirements which shall be met to implement plant modifications. It also provides standardized guidelines for the implementation of these modifications from initiation to documentation. Three NSMs were reviewed for conformance to the NSM manual. A brief description of each follows:

a. NSM MG-1-1554, Rev. 0

This NSM involved the deletion and addition of instrumentation required to monitor feed/condensate booster pump trip pressure. It incorporates a 2-out-of-3 logic in order to preclude the loss of all three instrument channels due to a single pneumatic transmitter failure.

b. NSM MG-1-1705, Rev. 0

This NSM replaced inadequately designed check valves in the auxiliary feed system.

c. NSM-MG-1-1346, Rev. 0

This NSM provides T-cold (Wide Range) instrumentation to the Standby Shutdown Facility (SSF). It replaced existing RTOs in two loops of the Reactor Coolant System with dual-element RTDs; one element is wired to the Process Control System and the other to an SSF readout.

During review of the above NSMs, the inspector verified that procedures for implementation of the NSM were approved in accordance with Technical Specification requirements, that acceptance testing of the modifications was conducted in accordance with technically adequate and approved procedures, and that as-built drawings were changed to reflect the modifications.

No violations or deviations were identified in the areas inspected.

8. Complex Surveillance (61701)

The inspector reviewed the following surveillance tests which were performed on May 2 and 3, 1985.

a. PT/0/A/4150/05, Pressurizer Safety Valve Setpoint Test

b. PT/2/A/4250/10, Unit 2 Relief Valve Set Pressure Testing

c. PT/0/A/4250/01, Main Steam Safety Valve Setpoint Test

The licensee had not completed the final review of the test results listed above. However, at least two levels of review had been completed prior to this inspection. Review of the results by the inspector for the main steam

safety valve setpoint test disclosed that some steps in the test procedure had not been signed off for testing three of the 20 valves. This problem may have been identified and resolved by the licensee during subsequent final review. However, the failure of licensee personnel to identify missing signatures during the first two levels of the review process is evidence of a weakness in the test procedure completion verification process. This is identified as Inspector Followup Item (369/85-24-01 and 370/85-25-02), "Adequacy of Review of Completed Test Results", pending further NRC review.