UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

JAN 1 1 1979

Report No.: 50-369/78-43

Docket No.: 50-369

License No.: CPPR-83

Licensee: Duke Power Company
Post Office Box 3318
422 South Church Street
Charlotte, North Carolina 28242

Facility Name: McGuire Nuclear Station

Inspection at: McGuire Nuclear Station
Cornelius, North Carolina

Inspection conducted: December 18-21, 1978

Inspectors: W. T. Cottle
J. A. Dyer
D. G. Hinckley

Reviewed by: R. C. Lewis 1/10/78
R. C. Lewis, Chief Date
Reactor Projects Section No. 2
Reactor Operations and Nuclear Support Branch

Inspection Summary

Inspection on December 18-21, 1978 (Report No. 50-369/78-43)
Areas Inspected: Routine, unannounced inspection of facility operating procedures; preparations for hot function testing; follow-up of open items; and review of Technical Specifications. The inspection involved 61.5 inspector-hours on-site by three NRC inspectors.
Results: In the areas inspected, no items of noncompliance or deviations were identified.

DETAILS I

Prepared by: R.C. Lewis for 1/10/79
W. T. Cottle, Reactor Inspector Date
Reactor Projects Section No. 2
Reactor Operations and Nuclear
Support Branch

H C Dance /for 1/10/79
D.G. Hinckley, Reactor Inspector Date
Reactor Projects Section No. 1
Reactor Operations and Nuclear
Support Branch

Dates of Inspection: December 18-21, 1978

Reviewed by: R.C. Lewis for 1/10/79
R. C. Lewis, Chief Date
Reactor Projects Section No. 2
Reactor Operations and Nuclear
Support Branch

1. Persons Contacted

*M. McIntosh, Station Manager
*G. Pollak, Project and Licensing Engineer
*D. Franks, QA Engineer
*T. Keene, Station Health Physicist
*M. Pacetti, Test Engineer
*B. Barron, Operating Engineer
*M. Sample, Technical Services Engineer
*A. Segrest, Mechanical Design Engineer
G. Gilbert, Operating Engineer
G. Copp, Project and Licensing Engineer

The inspectors also interviewed several other licensee employees, including health physics and operations personnel.

*Present during the exit interview on December 21, 1978.

2. Licensee Action on Previous Inspection Findings

Not inspected.

3. Unresolved Items

No new unresolved items were identified.

4. Management Interview

A meeting was held at the conclusion of the inspection on December 21, 1978, with the Station Manager and members of his staff as denoted in paragraph 1. The inspectors summarized the scope and findings of the inspection.

5. Plant Tour

The inspectors toured the Unit 1 reactor building, outside structures, and portions of the auxiliary building to observe construction and testing activities in progress. The effort on reactor building and auxiliary building cleanup is continuing with some areas showing a great deal of improvement. Most of the plant areas observed will require a significant cleanup effort prior to fuel loading to meet the station housekeeping and cleanup effort prior to fuel loading to meet the station housekeeping and cleanliness requirements.

No items of noncompliance or deviations were identified.

6. Technical Specification Review

The inspector reviewed the Proof and Review version of the McGuire Technical Specifications for clarity and enforceability. The scope of the inspector's review was primarily limited to the clarity of the Limiting Conditions for Operation, Surveillance Requirements, Design Features, and Administrative Controls, including applicable action statements. Numerous specifications were discussed with licensee representatives to ensure that areas having the potential for misinterpretation by the inspector or licensee were considered for inclusion in the inspector's comments.

The inspector s comments will be submitted to the Division of Reactor Operations Inspection for transmittal to the Office of Nuclear Reactor Regulation.

7. Independent Inspection Effort

The inspector reviewed the station emergency procedures for the Loss of Component cooling EP/0/A/5000/16, and Steam or Feedwater Line Rupture, EP/0/A/5000/07. The inspector's comments on these procedures will be coordinated with the overall McGuire procedure review effort.

The inspector reviewed the physical layout of the Chemical and Volume Control System demineralizers, the Boron Thermal Regeneration System demineralizers, the Boron Recycle System feed demineralizer, and the provisions for transferring spent resin from these demineralizers.

The purpose of this review was to obtain additional information on a potential problem identified in Region II Report No. 50-369/78-41 on system layout and design features which effect the radiological exposures which might be experienced in performing maintenance in these areas.

No items of noncompliance or deviations were identified.

8. Review of Operating Procedures

The licensee's procedure index was reviewed to determine if the procedure listing included those procedures identified in Regulatory Guide 1.33 in the following categories: Administrative Procedures; General Plant Operating Procedures; and, Procedures for Startup, Operation and Shutdown of Safety-Related Systems. This review was not completed and will continue during subsequent inspections.

DETAILS II

Prepared by: R. D. Martin for 1/11/79
J. A. Dyer, Reactor Inspector Date
Nuclear Support Section No. 1
Reactor Operations and Nuclear
Support Branch

Dates of Inspection: December 18-21, 1978

Reviewed by: R. D. Martin 1/11/79
R. D. Martin, Chief Date
Nuclear Support Section No. 1
Reactor Operations and Nuclear
Support Branch

1. Persons Contacted

E. Estep, Associate Engineer
A. Kientz, Junior Engineer M. Kitlan, Assistant Engineer
D. Marquis, Assistant Engineer
*M. McIntosh, Station Manager
*M. Pacetti, Test Engineer
*M. Sample, Technical Services Engineer

The inspector also held discussions with control room operating personnel.

*Denotes those present at the Exit Interview.

2. Licensee Action on Previous Inspection Findings

Not inspected.

3. Unresolved Items

No new, unresolved items were identified.

4. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on December 21, 1978. The inspector summarized the purpose and findings of the inspection as reported in the following paragraphs.

5. Hot Functional Testing Status

The inspector was informed that the hot functional test program was being delayed due to the "feed and bleed" operation currently in progress to remove resin from the reactor coolant system. The means by which the resin was introduced to the reactor coolant system has not been determined. A temporary filter is being fabricated for installation in the letdown system.

6. Previous Inspector Identified Areas of Concern

a. 369/78-06-01, Closed. Diesel support system pumps did not have reference values recorded during preoperational testing, as required by Subsection IWP of Section XI of the ASME Boiler and Pressure Vessel Code.

As permitted by the code, a description of the proposed inservice testing program, as well as specific requests for relief from code requirements determined to be impractical, was submitted by Duke Power Company to NRR on November 14, 1978. This request included relief from compliance with Subsection IWP with regard to the diesel support system pumps.

b. 369/78-06-03, Open. Diesel test procedures do not verify that emergency start signals will return the diesel to design operation should a loss of off-site power occur when the diesel is paralled to the bus for periodic testing.

Procedure TP/1/A/1350/25 is being revised to include this test.

c. 369/78-21-01, Open. Acceptance criteria in TP/1/A/1200/03C is not in agreement with FSAR Figure 6.3.2-1 Sheets 1, 2 and 3.

The licensee is awaiting information from Westinghouse.

d. 369/78-21-02, Closed. Management of water inventory during conduct of TP/1/A/1200/03C. The inspector reviewed the "Control Room Operators Log" for September 28 and 29, 1978. Management of water inventory was as required by the test procedure and "Station Directive" 4.2.1.

e. 369/78-21-03, Open. Each instrument channel which provides an actuation signal to either the RPS or ESFAS must be tested to determine overall safety system response time and to verify the technical specification operability requirement.

The procedures for this test are in the the process of being written.

f. 369/78-21-04, Closed. Verify operability of the pressurizer relief tank as described in FSAR Section 3.9.1.1, 3.9.1.2 and 5.5.11.1.

The inspector verified that the operation of the pressurizer relief tank would be conducted with the reactor coolant system at normal operating temperature and pressure by review of TP/1/A/1150/15 approved December 1, 1978.

g. 369/78-33-01, Open. Need procedure for post hot functional examination of core support structure for integrity, per Regulatory Guide 1.20 and as identified in FSAR Figure 3.9.1-1.

The procedure for this test is in the process of being written.

h. 369/78-38-01, Closed. Review results of TP/1/A/1200/03C after retest.

The inspector will review the completed retest results as a part of the NRC test results review program.

i. 369/78-38-02, Open. Monitor check valves 159, 170, 181 and 193 during hot functional testing to determine if insulation or testing at hot conditions is required.

Draft procedure changes have been written but not yet submitted for approval.

j. 369/78-38-03, Closed. The setpoint of eight main steam safety valves in TP/1/A/1250/05 differ from the setpoints listed in FSAR Table 10.3.2. The main steam safety valve setpoints in the test procedure are in agreement with the setpoints specified in McGuire proposed technical specifications Table 3.7-4. An FSAR change is being submitted by Duke Power Company to bring the FSAR listed setpoints in agreement with the Technical Specification requirements.

k. 369/78-38-04, Open. Instrument setpoints differ between "Precaution Limitation and Setpoint Document", FSAR and "Proposed Technical Specifications". These documents are currently being revised by Duke Power Company licensing personnel for updating.

l. 369/78-38-05, Closed. Revise TP/1/A/1150/15 to clarify the intent of the test.

The inspector verified that the test purpose has been revised to clarify the intent of the test by reviewing TP/1/A/1150/15, approved December 1, 1978.

m. 369/78-78-05, Closed. Need procedure to inspect ASME Section III, class 1, 2 and 3 piping during initial plant heatup.

The inspector verified that ASME Section III, class 1, 2 and 3 piping will be inspected during heatup by reviewing TP/1/A/1150/08.