

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

Report Nos.: 50-369/85-14 and 50-370/35-15

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: March 20 - April 20, 1985

Dance Inspectors: Senior Resident Inspector erson, Resident Inspector Approved by: Mugh (Aanec Hugh C. Dance, Section Chief Division of Reactor Projects

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Signed

Date

SUMMARY

Scope: This routine, special, unannounced inspection involved 246 inspection hours on site in the areas of operations, safety verification, surveillance testing, maintenance activities and refueling activities.

Results: Of the five areas inspected, no violations or deviations were identified. One unresolved Item was identified.

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REPORT DETAILS

1. Licensee Employees Contacted

- *T. McConnell, Plant Manager
- *G. Cage, Superintendent of Operations
- D. Rains, Superintendent of Maintenance
- B. Hamilton, Superintendent of Technical Services
- *L. Weaver, Superintendent of Administration
- *B. Travis, Superintendent of Integrated Scheduling
- E. McCraw, License and Compliance Engineer
- *R. White, IAE Engineer
- *G. Terrell, Station Health Physicist
- *R. Rider, Maintenance Engineer
- *A. Sipe, McGuire Safety Review Group
- *R. Pierce, IAE Engineer
- *D. Mendezoff, License and Compliance Engineer

Other licensee employees contacted included construction craftsmen, engineers, technicians, operators, mechanics, security force members, and office personnel.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on April 26, 1985, with those persons indicated in paragraph 1 above. The licensee acknowledged understanding of the issues discussed and offered no substantive related discussion.

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

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

Unresolved Items*

Unresolved items are discussed in paragraph 6.

5. Plant Operations

The inspection staff reviewed plant operations during the report period, March 20 - April 20, 1985, to verify conformance with applicable regulatory

*An Unresolved Item is a matter about which more information is required to determine whether it is acceptable or may involve a violation or deviation.

requirements. Control room logs, shift supervisors logs, shift turnover records and equipment removal and restoration records were routinely perused. Interviews were conducted with plant operations, maintenance, chemistry, health physics, and performance personnel.

Activities within the control rooms were monitored during shifts and at shift changes. Actions and/or activities observed were conducted as prescribed in applicable station administrative directives. The complement of licensed personnel on each shift met or exceeded the minimum required by technical specifications.

Plant tours were taken during the reporting period on a systematic basis. The areas toured included but were not limited to the following:

> Turbine Buildings Auxiliary Building Units 1 and 2, Electrical Equipment Rooms Units 1 and 2, Cable Spreading Rooms Station Yard Zone Within the Protected Area Unit 2 Reactor Building

During the plant tours, ongoing activities, housekeeping, security, equipment status and radiation control practices were observed.

a. Unit 1 Operations

McGuire Unit 1 began the reporting period in Mode 1 operating at 65% power to facilitate optimum outage scheduling. The unit continued operating at or about 65% power until April 6, when power was reduced to 31% again to optimize coordination of outage scheduling with Unit 2. On April 8 the unit was shut down when an out of specification boron sample was received from the "A" cold leg accumulator. Following correction of the boron concentration the unit was restarted and entered Mode 1 and was subsequently paralleled to the grid on the morning of April 10th. The unit was then maintained at approximately 34% through April 19, 1985, when the unit was shutdown for a refueling outage. This is the second refueling outage for Unit 1.

b. Unit 2 Operations

McGuire Unit 2 began the reporting period in Mode 6 in the midst of the first refueling outage with fuel load in progress. Following completion of fuel load and core alterations the unit entered Mode 5 on April 9. The unit remained in Mode 5 throughout the duration of the reporting period.

6. Missing Valve Operator Shorting Bars

On April 3, 1985, at 3:05 p.m., while performing Performance Test PT-2-A-4200-09A ESF Train A, the licensee found that shorting bars which were to have been installed on the breaker of the operator of valve 2NI-9A had not been installed. The shorting bars were to have been installed to bypass the thermal overload protection of the breaker to assure valve operation during an accident situation.

This issue is currently under review and will be maintained as an Unresolved Item pending completion of that analysis (50-370/85-15-01).

7. Surveillance Testing

The surveillance tests categorized below were analyzed and/or witnessed by the inspector to ascertain procedural and performance adequacy. The completed test procedures examined were analyzed for embodiment of the necessary test prerequisites, preparations, instructions, acceptance criteria, and sufficiency of technical content. The selected tests witnessed were examined to ascertain that current written approved procedures were available and in use, that test equipment in use was calibrated, that test prerequisites were met, system restoration completed and test results were adequate. The selected procedures perused attested conformance with applicable Technical Specifications and procedural requirements, they appeared to have received the required administrative review and they apparently were performed within the surveillance frequency specified.

Procedure Number

Procedure Title

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PT/2/A/4600/08 PT/1/A/4250/04C PT/2/A/4252/04 PT/2/A/4355/01A

PT/1/A/4150/14 PT/2/A/4252/02 PT/2/A/4206/03 PT/2/A/4360/11C PT/1/A/4251/02 PT/1/A/4601/02 PT/0/A/4457/01A

PT/1/A/4403/01B PT/1/A/4209/01A PT/0/A/4350/11 PT/1/A/4401/01B PT/1/A/4206/01A PT/1/A/4601/03

PT/1/A/4601/04 PT/1/A/4251/02 PT/1/A/4208/01A PT/1/A/4252/01A PT/1/A/4252/01B PT/1/A/4150/14 Engineering Safety Features Actuation Periodic Test Precriticality Survey Items Turbine Generator Overspeed Test CA Valve Movement Test/Shutdown Diesel Generator 2A Room Sump Pump Performance Test PORV Function CA Valve Stroke Timing-Quarterly NI Valve Stroke Timing-Quarterly Performance Test on 125 VDC Battery BB Valve Stroke Timing-Quarterly Protective System Channel II Function Test Control Room Chilled Water Pump 1 Performance Test RN Pump 1B Performance Test NV Pump 1A Performance Test RCP UV/UF Functional Test KC Train B Performance Test NI Pump 1A Performance Test Protective System Channel III Functional Test Protective System Channel IV Functional Test BB Valve Stroke Test NS Pump 1A Performance Test CA Pump 1A Performance Test CA Pump 1B Performance Test PORV Channel Function Test

PT/2/A/4208/01A N PT/2/A/4206/03 N PT/2/A/4209/01B N PT/2/A/4601/03 P

NS Pump 2A Performance Test NI Valve Stroke Test NV Pump 2B Performance Test Protective System Channel III Performance Test Standby Makeup Pump Performance Test

8. Unit 2 Refueling Outage

PT/2/A/4209/01C

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During this report period, Unit 2 was involved with a refueling outage. During this outage, the following major maintenance activities and plant modifications were completed:

- a. Following the destruction of several main journal bearings on the 2A diesel generator (DG), the crankshaft was replaced.
- b. The Reactor Vessel Level Indication System (R VLIS) was installed.
- c. Three containment spray pressure transmitters were replaced.
- d. Steam generator blowdown valves BB-140, 141, 142, and 143 were removed.
- e. The main feedwater pump pedestals were replaced due to cracking in the old concrete pedestals. They were replaced with steel pedestals.
- f. Changeout of the Unit 2 moisture separator reheater tube bundles.
- 9. Maintenance Observations

The maintenance activities categorized below were analyzed and/or witnessed by the resident inspection staff to ascertain procedural and performance adequacy. The completed procedures examined were analyzed for embodiment of the necessary prerequisites, preparations, instruction, acceptance criteria and sufficiency of technical detail. The selected activities witnessed were examined to ascertain that were applicable, current written approved procedures were available and in use, that prerequisites were met, equipment restoration completed and maintenance results were adequate. The selected work requests/ maintenance packages perused attested conformance with applicable Technical Specifications and procedural requirements and appeared to have received the required administrative review.

Work Request	Equipment
120067 040575 040576 55779 92430	Repair NC-133 SR Detector NI-31 SR Detector NI-32 2B NV Pump Perform Checkout of
	Electrical Portion of RVLIS Installation Unit 2