



UNITED STATES  
 NUCLEAR REGULATORY COMMISSION  
 REGION II  
 101 MARIETTA ST., N.W., SUITE 3100  
 ATLANTA, GEORGIA 30303

Report No.: 50-370/83-09

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

Docket No.: 50-370

License No.: CPPR-84

Facility Name: McGuire 2

Inspection at McGuire site near Charlotte, North Carolina

Inspectors:	<u>Frank Jape</u>	<u>2/22/83</u>
	M. Thomas	Date Signed
	<u>Frank Jape</u>	<u>2/22/83</u>
	H. E. P. Krug	Date Signed
Approved by:	<u>Frank Jape</u>	<u>2/22/83</u>
	F. Jape, Section Chief	Date Signed
	Engineering Programs Branch	
	Division of Engineering and Operational Programs	

SUMMARY

Inspection on January 31 - February 4, 1983

Areas Inspected

This routine, unannounced inspection involved sixty-two inspector-hours on site in the areas of preoperational test witnessing, preoperational test results review, and plant procedures.

Results

Of the three areas inspected, no violations or deviations were identified.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*M. D. McIntosh, Station Manager
- \*T. L. McConnell, Superintendent of Technical Services
- \*J. W. Boyle, Unit 2 Test Engineer
- \*T. J. Keane, Station Health Physicist
- \*G. A. Comp, Nuclear Engineer
- \*D. Mendezoff, Licensing Engineer
- L. Firebaugh, Assistant Operations Engineer

Other licensee employees contacted included test coordinators, technicians, senior operators and office personnel.

#### NRC Resident Inspector

W. Orders, Senior Resident Inspector

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on February 4, 1983, with those persons indicated in Paragraph 1 above. The licensee acknowledged the inspector's findings with no significant comment.

### 3. Licensee Action on Previous Enforcement Matters

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Independent Inspection Effort (92706) - Unit 2

The inspectors toured the control room and portions of the auxiliary building to verify that on-going activities were being accomplished in accordance with procedures.

### 6. Preoperational Test Witnessing (70312, 70316, 70317) - Unit 2

The inspectors witnessed portions of the preoperational tests listed below to observe overall test personnel performance, verify that an approved procedure was available and in use, test equipment was properly calibrated, and deficiencies identified during test were properly documented.

- TP/2/A/1200/03D, Engineered Safety Features (ESF) Functional Test.

The inspector witnessed portions of section 12.7 of the ESF test. This section was added by change No. 8 to the test when licensee personnel found that the test as written did not satisfy Technical Specification (TS) surveillance requirement 4.8.1.1.2.d.5. This TS surveillance verifies that on an ESF actuation test signal (without loss of offsite power) the diesel generator start on the auto start signal and operate for five minutes or more on standby. Diesel generator voltage and frequency are measured in order to verify that the TS requirement of at least 4160 volts and 57 Hertz within 11 seconds after the auto start signal has been met.

- TP/2/A/1350/26A, Diesel Generator 2A Start Verification Test.

The purpose of this test is to verify that the diesel generator (D/G) will start, accelerate to rated speed and accept load on a repetitive basis. The D/G is to be started and loaded to 4000 kilowatts and maintain the load for 60 minutes or more, for 35 consecutive times.

- TP/2/A/1450/07, Loss of Instrument Air. The major objective of this test is to demonstrate that all safety related air operated valves move to their fail safe position with a loss of instrument air pressure. The inspectors witnessed portions of Section 12.4 of the test.
- TP/2/A/1600/03, Reactor Protection System Functional Test. The functional operation of the RPS system is verified by this test. The test demonstrates the capability of the reactor protection system and engineered safeguards actuation system to respond properly to logic initiation signals. The inspectors witnessed portions of Section 12.20 of the test.

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

#### 7. Preoperational Test Results Review (70320, 70324) - Unit 2

The inspector reviewed the as-run copies of the completed procedures listed below to verify that individual test steps and data sheets were properly initialed and dated, test deficiencies identified were properly evaluated and resolved, test changes were approved in accordance with administrative procedures, and test changes did not constitute a change in the basic objectives of the test. The following completed procedures were reviewed:

- TP/2/A/1100/01, Controlling Procedure for Hot Functional Testing
- TP/2/A/1150/05, Pressurizer Preliminary Spray Flow Functional Test
- TP/2/A/1150/06, Pressurizer Power Operated Relief Isolation

- TP/2/A/1150/15C, Hot Functional Testing of Steam Generator Level Alarms and Indications
- TP/2/A/1200/05B, RHR System Functional Test (Hot)
- TP/2/B/1350/35, Hydrogen Mitigation System (EHM) Functional Test
- TP/2/A/1550/03K, Index of Spent Fuel Pool Manipulator Crane
- TP/2/A/1650/01, Functional Checkout of the Auxiliary Shutdown Panels

In conjunction with reviewing some of the hot functional testing (HFT) test results, the inspectors selected for review, several of the operating procedures utilized during HFT. The inspectors verified that changes made to the procedures, as a result of discrepancies identified during HFT, were made in accordance with administrative procedures. The following operating procedures were reviewed:

- OP/0/A/6400/09, Containment Ventilation Cooling Water System
- OP/0/A/6450/03, Auxiliary Building Ventilation System
- OP/2/A/6100/01, Controlling Procedure for Unit Startup
- OP/2/A/6150/02A, Reactor Coolant Pump Operation
- OP/2/A/6200/01, Chemical and Volume Control System
- OP/2/A/6200/04, RHR System
- OP/2/A/6250/01, Condensate and Feedwater System
- OP/2/A/6250/02, Auxiliary Feedwater System
- OP/2/A/6300/01, Turbine - Generator Operation
- OP/2/A/6400/05, Component Cooling Water System
- OP/2/A/6400/06, Nuclear Service Water System

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

#### 8. Plant Procedures (42400, 42451) - Unit 2

The inspector reviewed the following documents to determine that administrative controls are adequate for implementing and maintaining the procedures for Unit 2.

- Section 13.5 of the McGuire FSAR
- Regulatory Guide 1.33, Quality Assurance Program Requirements (Operations)
- ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
- Administrative Policy Manual for Nuclear Stations (APM), Section 2.3, Control of Measuring and Test Equipment
- APM Section 3.1, Operations
- APM Section 4.2, Administrative Instructions for Permanent Station Procedures
- APM Section 4.3, Administrative Instructions for Temporary Station Procedures
- McGuire Station Directive 2.3.0, Control of Measuring and Test Equipment
- Station Directive 2.5.0, Training Program Implementation
- Station Directive 3.1.1, Reactor Operator's Logbook
- Station Directive 3.1.4, Conduct of Operations
- Station Directive 3.1.28, Operations Handling of Procedures
- Station Directive 4.2.1, Handling of Station Procedures
- Station Directive 4.7.0, Control of the Maintenance Program

The above documents were reviewed to verify that:

- Administrative controls have been established for the preparation, review, approval and revision of procedures
- Controls have been established for the disposal of outdated procedures, handling of temporary changes, making the training organization aware of changes to procedures
- Controls have been established for the preparation and use of various types of operating logs, shift turnover activities, and log reviews

The inspector reviewed plant procedures indexes for operating procedures and maintenance procedures to verify that procedures being issued are typical of those in Section 13.5 of the FSAR and Regulatory Guide 1.33. Licensee personnel stated that a large percentage of the procedures being used for

Unit 1 have been made applicable to Unit 2. Each procedure is assigned a unique alpha-numeric identification number. Procedures unique to each unit have either a "1" or "2" as the second set of characters in the identification number. Procedures applicable to both units have a "0" as the second set of characters.

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