



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

Report No. 50-370/82-18

Licensee: Duke Power Company
472 South Church Street
Charlotte, NC

Facility Name: McGuire Unit 2

Docket No. 50-370

License No. CPPR-84

Inspection at McGuire site near Charlotte, North Carolina

Inspector: M. D. Hunt M. D. Hunt for 7-27-82
M. D. Hunt Date Signed

Approved by: T. E. Conlon T. E. Conlon for 7-27-82
T. E. Conlon, Section Chief Date Signed
Engineering Inspection Branch
Division of Engineering and Technical Programs

SUMMARY

Inspection on July 19-22, 1982

Areas Inspected

This routine, unannounced inspection involved 20 inspector-hours on site in the areas of instrumentation as-built review, licensee action on previous inspection findings, licensee identified items and inspector followup items.

Results

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

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *J. M. Hoover, Construction Electrical Engineer
- *D. B. Lampke, McGuire Nuclear Station Licensing
- *M. S. Starnes, Senior Construction Engineer
- *J. Waddel, Electrical/Instrumentation QA
- *J. W. Willis, Project QA Engineer

Other licensee employees contacted included five QA/QC technicians and three office personnel.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 22, 1982, with those persons indicated in paragraph 1 above. The inspector informed the licensee of Unresolved Item 370/82-18-01, Determine the Proper Use Code for the Instruments Listed in NRC 14346 (paragraph 5).

The licensee advised that this item was being referred to the engineering division.

3. Licensee Action on Previous Inspection Findings

- a. (Closed) Unresolved Item 370/80-09-04, Bus Intertie Control. The inspector examined Drawing MC 1705-01, Revision 37, 125 VDC/120 VAC-Vital Instrumentation and Control Power System. The breakers which are used to tie the 125 VDC buses together are key locked in such a manner that the batteries cannot be paralleled.
- b. (Closed) Deviation Item 370/82-10-01, Failure To Install Fire Detection System in Fuel Storage Area Prior to Receipt and Storage of Fuel. The inspector reviewed the licensee's work request No. 108807-OPS which verified the installation wiring checks and functional tests for both the detection failure and smoke detector circuits for the detectors installed in the Unit 2 spent fuel pool area.

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 5.

5. Independent Inspection Effort (92706B)

The inspector selected several instrumentation components which monitor pressures and levels in systems important to reactor safety. The installation of these components was compared to the "as-built" drawings and inspection records. The inspector compared serial numbers, model numbers, and identification numbers with the inspection records generated by inspection procedure M-61, Revision 4, Instrumentation Installation Inspection. The components were installed and inspected in accordance with the requirements of Mechanical Instrumentation and Control Standards, Installation Field Practices, drawing series ICS-A-20. The location of the components was in accordance with drawing No. MC2499-01-10 Revision 32, Instrument Locations for Reactor Building and Doghouse.

Listed are the components and the "as built" drawing used for verification.

<u>INSTRUMENT NO.</u>	<u>DRAWING NO.</u>
NCLT5160	MC-2499-NC4 Rev 9
NCPT5160	MC-2499-NC4 Rev 9
NCLT5170	MC-2499-NC5 Rev 6
NCPT5170	MC-2499-NC5 Rev 6
CAFT5111	MC-2499-CA7 Rev 8
CAFT5110	MC-2499-CA7 Rev 8
CFLS6520	MC-2499-CF16 Rev 1
CFLS6550	MC-2499-CF16 Rev 1
CFLS6510	MC-2499-CF16 Rev 1
CFLS6530	MC-2499-CF16 Rev 1

The sensing line connections, drain valves, isolation valves, and manifold valves for each instrument were installed in accordance with the listed mechanical drawings.

The licensee assigns a "Use Code" number for each instrument covered by the instrument standards. Instruments assigned to Use Code 8 have sensing lines connected to the ASME III pressure boundary but the instruments do not perform a safety related function. In several instances the instruments designated as Use Code 8 had safety related, train designated cabling connected to them. Discussions with the licensee's electrical and mechanical personnel revealed that a different method of safety designation may have been used. Nonconforming report No. 14346 was issued which questioned the designation for eight pressure switches in the auxiliary feedwater system. This question will require further examination and clarification by the licensee and is identified as Unresolved Item 370/82-18-01, Determine the Proper Use Code for the Instruments Listed in NCR No. 14346.

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

6. Licensee Identified Items (LII) - 10 CFR 50.55(e)

- a. (Closed) LII 370/CDR 81-08, Valve 2RN86A Limitorque Operator-Lubricant Leaking Into Limit Switch Compartment. The licensee submitted a final report to RII on October 21, 1981. The inspector examined nonconforming item report No. 13676 which required rotation of valve 2RN86A operator, replacement of damaged cable, and examination of all other limitorque operator orientation to insure that the limit switch compartments are facing downward. This item remains open for Unit 1 until the first refueling outage.
- b. (Closed) LII 370/77-06-01, Valve Rigidity Problem. Duke Power Company submitted a final report to RII October 22, 1977, but valve modification for Unit 2 had not been completed. The Unit 2 valves were identified on nonconforming report No. 8459. The inspector reviewed the valve bracket changeout procedure and final inspection records for 20 valves for Unit 2.
- c. (Closed) LII 370/CDR-82-03, Misidentification of Non ASME Materials as ASME Class II Materials. This item was reported to RII on April 8, 1982. Duke Power Company submitted a final report dated July 13, 1982. The inspector reviewed the corrective action taken by the licensee in conjunction with the closure of NCR No. 14135 as well as the additional instructions added to the records review checklist for placing 516 grade 70 plate in storage.

7. Inspector Followup Items (IFI)

(Closed) IFI 370/82-10-05, Supervised Fire Detection For Fuel Storage Fire Detection System. This wiring of the detector on Column QQ-61 was examined by the licensee per NCR No. 14277 and determined to be correct. Due to the inaccessibility of the detector, a single 4-conductor cable was installed rather than the normal two 2-conductor cables. The wiring diagram for these detectors, shown on drawing MC 1762-01.05, does not place a requirement for the type of cable to be used but requires four conductors to make up the two circuits.