



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

MAY 23 1984

Report No.: 50-413/84-50

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

Docket No.: 50-413

License No.: CPPR-116

Facility Name: Catawba 1

Inspection at Catawba site near Rock Hill, South Carolina

Inspector: *G. L. Troup*
G. L. Troup

5/18/84
Date Signed

Approved by: *D. M. Montgomery*
D. M. Montgomery, Section Chief
Emergency Preparedness and Radiological Safety
Branch
Division of Radiation Safety and Safeguards

5/18/84
Date Signed

SUMMARY

Inspection on April 30 - May 4, 1984.

Area Inspected

This routine unannounced inspection involved 35 inspector-hours on site in the areas of radioactive waste systems, ventilation systems, preoperational testing, process and effluent monitors, and followup on previously identified items.

Results

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

8406220044 840523
PDR ADOCK 05000413
Q PDR

REPORT DETAILS

1. Persons Contacted

- *J. W. Cox, Technical Services Superintendent
- *R. H. Charest, Station Chemist
- W. P. Deal, Station Health Physicist
- R. D. Kinard, Health Physics Staff Coordinator
- R. E. DeShazo, Health Physics Supervisor
- W. J. Davis, Gaseous Waste Supervisor
- *G. L. Courtney, Associate Health Physicist
- H. P. Smith, Technical Specialist/Performance
- *P. G. Leroy, Licensing Engineer
- P. N. McNamara, Assistant Health Physicist

Other licensee employees contacted included 2 technicians.

*Attended Exit interview.

2. Exit Interview

The inspection scope and findings were summarized on May 4, 1984, with those persons indicated in paragraph 1 above. One new inspector followup item was identified and discussed (84-50-01, paragraph 4.d). A licensee management representative acknowledged the findings and took no exceptions.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Process and Effluent Monitors

- a. FSAR Tables 11.5.1-1 and 11.5.1-2 describe the monitors for the liquid and gaseous process and effluent streams, respectively. FSAR Section 11.5 describes the various monitors and their functions in detail.
- b. The inspector toured the facility and observed the physical installation of several process and effluent monitors. The inspector traced the sample lines back to the monitors and verified that they were connected to the appropriate process lines. The inspector reviewed the installation for any conditions (numerous sharp bends, excessive sample line length, etc.) which could interfere with obtaining an adequate sample. Monitors examined were:
 - (1) 1-EMF-31, Turbine Building Sump Monitor.
 - (2) 1-EMF-33, Condenser air ejector exhaust monitor.
 - (3) 1-EMF-34, Steam generator water sample monitor.
 - (4) 1-EMF-35, 36, 37, Unit vent monitors.

- (5) 1-EMF-38, 39, 40, Containment atmosphere monitors.
- (6) 1-EMF-41, Auxiliary Building ventilation monitor.
- (7) 1-EMF-42, Fuel Building ventilation monitor.
- (8) EMF-43A, Control Room air intake monitor.
- (9) 1-EMF-44, Containment ventilation drain tank outlet monitor.
- (10) 1-EMF-47, Boron recycle evaporator condensate monitor.
- (11) EMF-50, Waste gas discharge monitor.
- (12) 1-EMF-52, Clean area floor drains discharge monitor.

- c. Based on a previous review of the monitor installations for the adequacy of sampling, the licensee identified that the installation of the sampling line for the Unit vent (1-EMF-35, 36, 37) was unsatisfactory due to the length and number of bends in the sample line. The sample line (common for the three monitors) was reinstalled with a shorter, more direct run. The inspector reviewed the new installation with licensee representatives and had no questions.
- d. The installation of the containment atmosphere monitors (1-EMF-38, 39, 40) had also been identified as an unsatisfactory installation due to the length of the sample lines (one line is approximately 250 ft. in length) as well as the number of bends, which will result in high sampling losses. A licensee representative stated that this installation was being discussed with Design Engineering to determine a sample line installation which is shorter and more direct to reduce sampling losses. The inspector stated that the existing sample line was unsatisfactory due to the potential high sample losses and that the revised installation would be reviewed during a subsequent inspection as a follow-up item (84-50-01).
- e. The unit vent particulate monitor (1-EMF-35) utilizes a moving filter to collect and monitor material released through the vent. The inspector asked a licensee representative how the filter paper would be analyzed to account for materials released through the vent. The licensee representative stated that the moving filter paper could not be adequately analyzed using the counting room equipment so the unit vent monitor was modified to incorporate a particulate filter and charcoal cartridge in parallel with the monitor to provide samples which can be removed and analyzed for determination of quantities of materials released. The inspector observed the modification and discussed its installation and use with the licensee representatives and had no further questions regarding this item.

5. Preoperational Test Procedures

- a. FSAR Table 14.2.12-1 describes the preoperational testing program and contains abstracts of various tests to be performed. The inspector reviewed ten preoperational test procedures against the requirements contained in the abstract. The inspector also reviewed the procedures

against the system description contained in the applicable FSAR section and verified that when the system description included a special function (alarm, valve trip, automatic start, etc.), the test procedure included a test of that function. Test procedures reviewed were:

- (1) TP 1/B/1200/10, Primary Sampling System Functional Test
 - (2) TP 0/A/1450/01, Control Room Outside Air Pressure Filter Train Preoperational Test
 - (3) TP 1/B/1450/03, Containment Purge Ventilation System Functional Test
 - (4) TP 1/B/1450/04, VA Filtered Exhaust and ASP Ventilation System Functional Test
 - (5) TP 1/A/1450/05, Control Room/Control Room Area Ventilation System Functional Test
 - (6) TP 1/B/1450/06, Annulus Ventilation System Functional Test
 - (7) TP 1/B/1450/15, Fuel Pool Ventilation System Functional Test
 - (8) TP 1/A/1450/17, Annulus Ventilation Filter Train Functional Test
 - (9) TP 1/B/1450/20, Containment Air Release and Addition Filter Train Functional Test
 - (10) TP 1/B/1450/21, Containment Purge Filter Train Functional Test.
- b. FSAR Section 14.2.3.2 and 14.2.3.3 described the manner for review and approval of test procedures and changes to procedures, respectively. As part of the procedure review, the inspector determined that the procedures (and any changes) described in 5.a were reviewed and approved as specified in the FSAR.
- c. In reviewing the test procedures for ventilation systems and filter trains, the inspector noted that the procedures specified different standard editions and acceptance criteria for tests other than those specified in the test abstracts of FSAR 14.2.12-1. The inspector discussed this with licensee representatives and reviewed the analyses and safety reviews which had been performed for these changes. A licensee representative showed the inspector the revised test abstracts which are being submitted to the FSAR. The inspector had no further questions on the test procedures. The inspector noted that the draft Technical Specifications specify testing in accordance with ANSI N510-1975 whereas the tests used ANSI N510-1980. A licensee representative, acknowledged this and stated that a change to the Technical Specifications would be requested.

- d. The acceptance criteria in the test abstracts for ventilation systems which include charcoal absorbers include a criterion for laboratory analysis of samples of the charcoal. The test procedures do not include this requirement. A licensee representative stated that the laboratory analysis results had been supplied with charcoal and that additional laboratory analyses were being performed. Licensee representatives acknowledged the inspector's comment that since the acceptance criteria include the laboratory analysis, the results should be reviewed as part of test review. A licensee representative stated that the laboratory analysis results would be included in the completed test procedure package to demonstrate compliance with the acceptance criteria.

6. Preoperational Test Results

- a. The inspector reviewed four completed preoperational test procedures. The review included the following verification of proper review and approval of changes; review and approval of the completed tests; identification and correction of identified deficiencies; completed results and retest as appropriate following deficiency correction or modification. No discrepancies were noted.

- (1) TP/O/B/1500/08A, Floor Drain System Functional Test
- (2) TP/O/B/1500/08B, Floor Drain System Functional Test
- (3) TP/O/B/1500/08C, Floor Drain System Functional Test
- (4) TP/O/B/1500/08E, Floor Drain System Functional Test

7. Review of Inspector Followup Items

(Closed) IFI 84-43-01, FSAR Description of Waste Gas Compressors. A revision to FSAR Section 11.3.2.2.1 has been submitted for inclusion in the next submittal. This item is closed for record purposes.

8. Waste Release Procedures

The inspector discussed the status of the health physics procedures for radioactive waste releases (1004/04, Radioactive Liquid Waste Release, and 1004/05, Radioactive Gaseous Waste Release). Licensee representatives informed the inspector that both procedures had been approved but are presently being revised. The inspector stated that the revised procedures would be reviewed during a subsequent inspection.