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

Report Nos.: 50-413/84-43

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 — Date Signed: 5/7/84

Approved by: D. M. Montgomery — Date Signed: 5/7/84
D. M. Montgomery, Section Chief
Emergency Preparendess and Radiological
Safety Branch
Division of Radiation Safety and Safeguards

SUMMARY

Inspection on April 17-20, 1984

Areas Inspected

This routine, unannounced inspection involved 20 inspector-hours on site in the areas of radioactive waste systems preoperational testing, control of liquid leakage and spillage, followup on previously identified items, and post-accident liquid sampling.

Results

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

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*J. W. Cox, Technical Services Superintendent
C. L. Hartzell, Licensing Engineer
*S. W. Dressler, Project Engineer
*R. H. Charest, Station Chemist
W. P. Deal, Station Health Physicist
A. J. Duckworth, Radwaste Chemistry Coordinator
G. T. Mode, Health Physics Support Functions Coordinator
W. J. Davis, Gaseous Waste Supervisor
S. W. Rodgers, Liquid Waste Recycle Supervisor
*P. G. Leroy, Licensing Engineer
A. P. Jackson, Staff Chemist

Other licensee employees contact included two technicians.

NRC Resident Inspector

P. K. VanDoorn, Senior Resident Inspector (Construction)
P. A. Skinner, Senior Resident Inspector (Operations)

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on April 20, 1984, with those persons indicated in paragraph 1 above. Two new inspector followup items were identified and discussed. The licensee acknowledged the findings and took no exceptions.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Review of Inspector Followup Items

a. (Open) IFI 84-22-01, Verification of Volumes of Waste Discharge Tanks. Temporary Chemistry procedures TC/O/B/9400/01 and TC/O/B/9400/02 have been issued to verify the actual volumes of liquid and gaseous waste discharge tank by physical measurement and calculation. These verifications have not been completed.

b. (Open) IFI 84-22-01, Determination of Tank Recirculation Times for Representative Sampling. Determination of the minimum recirculation times in accordance with TC/O/B/9400/03 (formerly TC/O/B/8100/03) is in progress but has not been completed.

c. (Open) IFI 84-22-03, Relocation of Liquid Waste Discharge Valve. Station Modification CN-00005 had been issued to relocate valve 1-WL-124 to permit isolation of the discharge line without discharging out-of-specification water. Relocation work has not been started.

d. (Open) IFI 84-22-04, Relocation of Reactor Coolant Monitor. Station Modification CN-10040 has been submitted to relocate monitor 1-EMF-48 to reduce the radiation levels in the primary sample room. Relocation work has not been started.

e. (Open) IFI 84-22-05, Ventilation for the Post-Accident Liquid Sample Cabinet. Station Modification CN-10050 has been submitted to design for installation of permanent ventilation ducting from the cabinet to the building ventilation. Installation of the duct is pending design action.

6. 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 four preoperational test procedures against the requirements contained in the abstract. The inspector also reviewed the procedures against the system descriptions 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/O/B/1500/02, Liquid Waste Recycle System Functional Test

(2) TP/O/B/1500/04, Gaseous Waste Management System Functional Test

(3) TP/O/B/1500/05, Liquid Waste Evaporator Functional Test

(4) TP/1/B/1600/01A, Process Radiation Monitoring System Functional Test

b. FSAR Sections 14.2.3.2 and 14.2.3.3 describe the manner for review and approval of test procedures, respectively. As part of the procedure review, the inspector determined that the procedures (and any changes) described in 6.a were reviewed and approved as specified in the FSAR.

c. FSAR Section 11.3.2.2.1 describes the waste gas compressors and their operation. The inspector noted that the description of starting of the compressors based on vent header pressure was not included in the functional test. Discussions with cognizant personnel revealed that

the FSAR description of the compressor operation is in error and does not reflect the system design or operation. A licensee management acknowledged this and agreed to submit an FSAR revision. This will be reviewed during a subsequent inspection. (84-43-01)

7. Liquid Leakage, Overflow and Spillage

a. The inspector observed that rooms which contain tanks, pumps, and process equipment are provided with elevated sills to contain spillage or overflows in the room. Other drains or overflows are piped to the floor drains.

b. The inspector observed that the Waste Monitor Tanks and associated pumps and piping are not located in a room. The equipment and effluent monitor (1-EMF-49) are provided with drains and sample points which do not have collection facilities (drip pan, drain collectors, etc.), which could result in contamination problems.

c. The inspector observed that the waste monitor tank sample points are provided with drain collectors but the sample valves are plug valves which cannot be throttled to control the flow. When attempting to collect a sample, the flow will result in splashing and spraying.

d. The inspector discussed this with licensee representatives, who acknowledged that this could result in the contamination of personnel and equipment. A licensee management representative stated that this would be reviewed with a possible solution being to install a sample sink or cabinet which would permit better control over the collection of samples. This will be reviewed during a subsequent inspection. (84-43-02)

8. Post-Accident Liquid Sampling

The inspector discussed the status of the testing and operability of the Post-Accident Liquid Sampling system (PALS). The system operating procedure (OP/0/A/6200/21) and the periodic test procedure (PT/1/A/4208/08) have been prepared and are in the review and approval cycle. However, based on problems with the PALS at another licensee facility, the licensee representative stated that major modifications were being considered to permit the PALS to meet the performance requirements. Consequently, the procedures will require revision based on the modifications. The inspector stated that the system will be reviewed after the modifications are identified and implemented.