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

Report Nos.: 50-327/78-23 and 50-328/78-17

Docket Nos.: 50-327 and 50-328

License Nos.: CPPR-72 and CPPR-73

Category: B1/A2

Licensee: Tennessee Valley Authority
830 Power Building
Chattanooga, Tennessee 37401

Facility: Sequoyah 1 and 2

Inspection at: Sequoyah Site, Soddy-Daisy, Tennessee

Inspection conducted: August 2-3, 1978

Inspectors: S. C. Ewald
L. L. Jackson

Reviewed by: A F Gibson 9/11/78
A. F. Gibson, Chief Date
Radiation Support Section
Fuel Facility and Materials Safety Branch

Inspection Summary

Inspection on August 2-3, 1978 (Report Nos. 50-327/78-23 and 50-328/78-17)
Areas Inspected: Routine unannounced inspection of liquid waste systems, status of unresolved items and status of preoperational testing for radwaste systems. The inspection involved 24 inspector-hours onsite by two NRC inspectors.
Results: No items of noncompliance or deviations were revealed.

DETAILS I

Prepared by: _____ 9/11/78
S. C. Ewald, Radiation Specialist Date
Radiation Support Section
Fuel Facility and Materials
Safety Branch

for _____ 9/11/78
L. L. Jackson, Radiation Specialist Date
Radiation Support Section
Fuel Facility and Materials
Safety Branch

Dates of Inspection: August 2-3, 1978

Reviewed by: _____ 9/11/78
A. F. Gibson, Section Chief Date
Radiation Support Section
Fuel Facility and Materials
Safety Branch

1. Persons Contacted

J. M. Ballentine, Plant Superintendent
*W. F. Popp, Assistant Plant Superintendent
*W. I. Andrews, QA Supervisor
*W. H. Kinsey, Jr., Assistant Results Supervisor
*J. T. Dills, Jr., Chemical Engineer
*R. L. Kitts, HP Supervisor
*R. M. Mooney, Preop Test Group
*A. W. Diegel, Construction

*Denotes those present at exit interview.

2. Licensee Action on Previous Inspection Findings

a. (Closed) Unresolved Item 77-16-01: Radioativity Analysis for Turbine Building Sump

The inspector reviewed Corrective Action Report (CAR) 10-77-24 and Design Change Request (DCR) 225. DCR 225, approved January 23, 1978, specifies that a continuous monitor will be installed to monitor discharges from the turbine building sump. This monitor will have an alarm and readout in the main control room. Appropriate FSAR changes are in progress. The inspector had no further questions.

b. (Closed) Unresolved Item 77-33-17: Plant Discharge Effluent Monitor

The inspector was shown the general location where the plant discharge effluent monitor is to be installed. This location will be in the cooling tower blowdown line, downstream of radioactive waste inputs, and upstream of the diffuser pond. The inspector stated that this item is closed as an Unresolved Item but the actual monitor installation will be followed up on a future inspection (327/78-23-01; 328/78-17-01).

c. (Open) Unresolved Item 77-33-17: Effluent Monitor Specifications

A licensee representative stated that this item was still under review.

3. Unresolved Items

There were no new Unresolved Items disclosed during this inspection.

4. Representative Sampling: Auxiliary Building Exhaust

This item was first discussed in RII Rpt. Nos. 50-327/77-16 and 50-328/77-12 and later in RII Rpt. Nos. 50-327/77-33 and 50-328/77-23. The inspector reviewed the status of DCR 215, which was approved on December 23, 1977. A licensee representative stated that specific design information (number of sample points, arrangement, etc.) was not yet available. Specific design information and actual installation will be reviewed during a future inspection.

5. Cask Decontamination Tank Recirculation

The subject of recirculation flows in the liquid radwaste system was first discussed in RII Rpt. Nos. 50-327/77-16 and 50-328/77-12 in paragraph 6.b.2. The inspector reviewed DCR 228 and the engineering review generated in response to DCR 228. The engineering review states that two volumes (Design Capacity) of the Cask Decontamination Tank can be recirculated in approximately 670 minutes. This time is based on a calculated flow rate. The inspector recommended that the licensee actually measure the recirculation rate during preop testing to ensure that calculated flows can be met and further, to evaluate the long recirculation time in terms of impact on radwaste operations. The inspector also informed the licensee that even if the predicted 670 minute recirculation time is achieved there still exists a question of whether or not adequate mixing will be achieved because of the large tank capacity and long recirculation time. The inspector stated that he would evaluate the mixing problem through calculations and

discussions with other members of the NRC staff and discuss his conclusions with the licensee at some future date (327/78-23-02; 328/78-17-02).

6. Preoperational Testing

The inspector discussed, with a management representative, the tentative schedule for preop tests related to the radwaste systems. Schedules for certain tests will be confirmed at a later date. Certain approved preoperational test instructions were obtained by the inspector for in-office review. There were no further questions in this area.

7. Plant Tour

Inspectors made plant tours both days of the inspection. The first day, inspectors were accompanied by a management representative who showed inspectors most of the major radwaste system components and discharge points including the cooling tower blowdown line and diffuser pond discharge. The second day, inspectors made an unaccompanied tour to examine more closely some of flow paths, sampling provisions, etc. The inspectors had no comments related to the plant tours.

8. Exit Interview

A discussion of the inspection findings was conducted on August 3, 1978, with Mr. W. F. Popp and other members of the plant staff. The Construction and Preop Test Group organizations were also represented at the exit interview.