



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

Report Nos. 50-327/82-19 and 50-328/82-19

Licensee: Tennessee Valley Authority  
500A Chestnut Street  
Chattanooga, TN 37401

Facility Name: Sequoyah

Docket Nos. 50-327 and 50-328

License Nos. DPR-77 and DPR-79

Inspection at Sequoyah Nuclear Station site near Chattanooga, TN

Inspector: *T. R. Collins* 9/2/82  
T. R. Collins Date Signed

Approved by: *K. P. Barr* 9/2/82  
K. P. Barr, Section Chief Date Signed  
Technical Inspection Branch  
Division of Engineering and Technical Programs

SUMMARY

Inspection on August 16-20, 1982

Areas Inspected

This routine, unannounced inspection involved 34 inspector-hours on site in the areas of Radiation Protection, Shipment of Radioactive Material, Licensee Event Reports, Previous Inspector Identified Items, Respiratory Protection Program, Ventilation and Purge System, and Effluent Radiation Monitoring Systems.

Results

Of the seven areas inspected, one apparent violation was identified in one area; no items of noncompliance were found in six areas.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*C. C. Mason, Plant Superintendent
- \*J. M. McGriff, Assistant Plant Superintendent
- \*J. L. Taylor, Chemical Engineer
- \*S. Holderfer, Assistant Health Physics Supervisor
- \*M. R. Harding, Compliance Supervisor
- \*A. M. Carver, Compliance Engineer
- \*R. W. Fortenberry, Nuclear Engineer
- D. E. Norwood, Chemical Engineering Aid
- J. S. Steigelman, Radwaste Coordinator
- J. R. Anderson, Health Physics Shift Supervisor
- J. A. Leamon, Outage Health Physics Shift Supervisor
- D. Crowley, Health Physics Shift Supervisor
- M. McMillian, Health Physics Technician

Other licensee employees contacted included three technicians and three office personnel.

#### NRC Resident Inspector

\*E. Ford

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on August 20, 1982, with those persons indicated in paragraph 1 above. The inspector discussed with licensee management the apparent violation of failure to follow procedure as required by Technical Specification 6.8.1.a. The Plant Superintendent acknowledged the inspector's findings.

### 3. Licensee Action on Previous Enforcement Matters

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Inspector Followup Items (Closed)

- a. (Closed) IFI (50-327/81-41-01 and 50-328/81-50-01) RM-14 Alarm Set Points. The inspector was informed by a licensee representative that a procedure revision was made to include checking and setting the alarm

set points on RM-14's on a weekly basis to insure proper set points. The inspector concluded that this was adequate and had no further questions.

- b. (Closed) IFI (50-327/81-41-02 and 50-328/81-50-01) Evaluation of the Radiation Work Permit Program. The inspector reviewed the current RWP program as described in procedure HPSIL-7 and concluded the program was adequate and had no further questions.

#### 6. Inspector Identified Items (Open)

- a. (Open) IFI (50-328/82-06-01) Start Up Shield Surveys. The inspector reviewed a test deficiency report issued to evaluate the existing shielding of two survey points RB-32 and RB-57. These two survey points exceeded the radiation levels as prescribed by Start Up Test Procedure (SU-1.0). The licensee is administratively controlling access to these areas until final evaluation is complete. The inspector concluded this was acceptable and informed licensee representatives that this would be inspected again upon the next routine inspection.
- b. (Open) IFI (50-327 & 328/82-06-02) Contamination Control Program. The inspector was informed by licensee representative that the portal monitors which were requisitioned to replace the existing portal monitors at the security building have not been received. The inspector informed licensee management this would be inspected upon the next routine inspection.

#### 7. Licensee Event Reports

- a. (Closed) Licensee Event Report (LER) 81-160 Essential Raw Cooling Water (ERCW) Radiation Monitor RM-90-134/141 Inoperable. Technical Specification 3.3.3.9 requires grab samples to be taken in the event of an inoperable status. The inspector reviewed an Engineering Charge Notice (ECN) No. 5119 which identified noise spikes to be the cause of the ERCW Radiation Monitor spurious high readings. The inspector concluded that grab samples were adequately taken and the corrective action taken to preclude future occurrences was acceptable.
- b. (Closed) Licensee Event Report (LER) 82-033 Containment Monitor RM-90-106/112. These monitors were declared inoperable due to closing of containment isolation valves. The licensee determined that field services personnel inadvertently disconnected the wiring to containment isolation valve 1-FCV-90-107, causing a loss of sample flow from the lower containment to the radiation monitor. The licensee immediately took disciplinary action against the personnel involved and instructed those same personnel in following procedures. The inspector concluded this was adequate and had no further questions.

- c. (Closed) Licensee Event Report (LER) 82.044 Purge Air Exhaust Monitor RM-90-130/131. The licensee discovered that there was no sample line from the "B" filter exhaust duct to the radiation monitor which was determined to be a design error. The licensee added the required sample line to establish sample flow to the radiation monitors. In addition, further investigation was conducted to ensure there were no other missing sample lines to radiation monitors. The inspector concluded the corrective action was adequate and had no further questions.
- d. (Closed) Licensee Event Report (LER) 82-024 Turbine Building Sump Monitor RM-90-212 and Condensate Demineralizer Monitor RM-90-225. The licensee determined the problems with these monitors were clogged flow switches and incorporated a revision to their Surveillance Procedure (51-476) to check and clean these flow switches on a weekly frequency. The inspector concluded this was adequate and had no further questions.
- e. (Closed) Licensee Event Report (LER) 82-051. Containment Monitor RM-90-106/112. A containment ventilation isolation was initiated due to a high radiation signal on Containment Monitors RM-90-106/112. The containment ventilation isolation signal was reset and the high radiation signal was cleared returning the system to service. The licensee determined that containment ventilation isolation would prevent automatic actuation capability and a study will be made to determine the possibility of changing the isolation logic to delete the requirement of the closing of the radiation monitoring containment isolation valves upon a containment ventilation isolation signal. The inspector concluded that this was adequate and had no further questions.

#### 8. Posting, Labeling and Control

The inspector toured the Auxiliary Building and Radwaste Building to verify proper posting of Radiation Controlled Areas, Radiation Areas, High Radiation Areas, Radioactive Materials Areas and Airborne Radioactivity Areas. No violations or deviations were observed.

#### 9. Posting of Notices to Workers

10 CFR 19.11 requires, in part, that each licensee post current copies of Form NRC-3, Notice to Employees, in a sufficient number of places to permit individuals engaged in licensed activities to observe them on the way to or from any licensed activity location. The inspector observed the posting of notices required by 10 CFR 19.11. No violations were identified.

#### 10. Housekeeping

The inspector toured the Auxiliary Building and Radwaste Building to verify the licensee's practices of housekeeping. The inspector determined by observation that housekeeping was adequate and had no further questions.

#### 11. Routine Surveys

The inspector reviewed the records of Routine Surveys as required by procedure HPS16-4 performed during the months of April, May, and June 1982. No violations or deviations were observed. The inspector had no further questions.

#### 12. Respirator Protection Program

The inspector reviewed the Respirator Protection Program as described in procedure HPSIL-3 and determined that the monthly self contained breathing apparatus (SCBA), the quarterly breathing air bottle inventory and the five (5) year hydrostatic test of breathing air bottles were adequately being conducted. The inspector stated to a licensee representative that an acceptance criteria of a minimum pressure acceptability of breathing air bottles should be incorporated on the monthly inspection data sheet. The cognizant supervisor acknowledged the inspector's concerns and stated a procedure revision would be initiated to add 2200 psig, as an acceptance criteria. The inspector concluded that this was adequate and stated this would be inspected upon the next routine inspection (IFI-82-19-01).

#### 13. Storage of Self Contained Breathing Apparatuses (SCBA's)

Previous inspections revealed the SCBA units were being stored in the corridor adjacent to the Health Physics Office. However, these units have been moved to the Turbine Building away from access to the regulated area due to plant modifications. The inspector informed licensee representatives and the cognizant supervisor that the storage of these SCBA units appeared to be inadequate if needed on an emergency condition. The inspector informed licensee management that this would remain as an inspector follow-up item pending the completion of the plant modifications (IFI-82-19-02).

#### 14. Ventilation and Purge System in the Auxiliary Building

The inspector reviewed two (2) completed Design Change Requests (DCR's) issued to change the design and operation of the ventilation and purge system to eliminate any noble gas radioactivity in the Auxiliary Building. The inspector concluded these DCR's appeared to be adequate. However, additional events have occurred since these DCR's have been worked. The inspector informed licensee management that further evaluation was necessary to determine the continued causes of release of noble gas radioactivity in the Auxiliary Building. Licensee management acknowledged the inspector's concerns and the inspector stated this would be inspected again upon the next routine inspection (IFI-82-19-03).

## 15. Byproduct Radioactive Material

Technical Specification 6.10.1.g requires byproduct radioactive material sealed sources to be leak checked and inventoried at least once every six months. The inspector reviewed the results of the inventory performed by the licensee for the first six (6) months of 1982 and had no further questions.

## 16. Shipment of Radioactive Material

The inspector reviewed the Radioactive Shipment No. 116 of low level compacted waste being shipped to U. S. Ecology, Richland, Washington, for burial. The inspector concluded by observation and independent radiation surveys that the radioactive waste shipment met (DOT) 49 CFR and 10 CFR 71 requirements.

## 17. Gaseous Effluent Radiation Monitoring

- a. On July 27, 1982, @ 0400 hours, the licensee determined that seven (7) effluent radiation monitors were inoperable due to a power failure in the panel supplying power to these monitors. The Shift Engineer on shift at the time of the occurrence contacted the Counting Room (Lead Shift Analyst) to inform him of a Limited Condition of Operation (LCO) identified by Technical Specification 3.3.3.10, Table 3.3-13, Action 42. The Lead Shift Analyst logged these inoperable monitors in the Counting Room conditional log book and the daily journal to ensure radiochemistry technicians perform  $\leq 4$  hour iodine and particulate filter samples and  $\leq 8$  hour grab samples for noble gas analysis as required by procedure S1-415, Gaseous Effluent Requirements and Technical Specification 3.3.3.10.
- b. At 0800 hours on July 27, 1982, radiochemistry technicians took applicable samples as required by procedure S1-415 and analyzed these accordingly and logged results in the conditional log book. However, the 0800 hour samples were not logged in T1-37 logsheet B.35 as required by procedure S1-415, Gaseous Effluent Requirements. The inspector informed licensee management that this was an apparent violation of Failure to Follow Procedure (V10) 82-19-01.
- c. The inspector discussed this with the cognizant supervisor and determined that the radiochemistry technician taking those samples and performing the analysis of these inoperable monitors was a technician trainee. Apparently the technician was not adequately informed of logging sample results in T1-37 logsheet B.35 or adequately supervised

by the lead shift analyst to verify proper logging of sample results in T1-37 logsheet B.35. The cognizant supervisor acknowledged the inspector's concerns and stated that closer supervision and a more thorough review of logging sample results in required log sheets would be done to insure requirements are met. The inspector stated this would be inspected again upon the next routine inspection.