



NUCLEAR REGULATORY COMMISSION

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

Report No.: 50-327/78-31

Docket No.: 50-327

License No. CPPR-72

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

Facility Name: Sequoyah Unit 1

Inspection at: Sequoyah Site, Daisy, Tennessee

Inspection conducted: September 19-22, 1978

Inspectors: R. H. Wessman  
H. D. Jenkins

Accompanying personnel: K. S. Greenbaum

Reviewed by: H. C. Dance for HCD  
H. C. Dance, Chief  
Reactor Projects Section No. 1  
Reactor Operations and Nuclear Support Branch

10/23/78  
Date

Inspection Summary

Inspection on September 19-22, 1978 (Report No. 50-327/78-31)

Areas Inspected: Routine, unannounced inspection of preoperational test program administrative controls; observation of test activities in progress; inspection of new fuel storage; and facility tour. The inspection involved 52 inspector-hours onsite by two NRC inspectors.

Results: Of the four areas inspected, no items of noncompliance or deviations were identified.

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## DETAILS I

Prepared by:

R. H. WessmanR. H. Wessman, Reactor Inspector  
Reactor Projects Section No. 1  
Reactor Operations and Nuclear  
Support Branch10/23/78

Date

Dates of Inspection: September 19-22, 1978

Reviewed by:

R. H. Wessman for HCDH. C. Dance, Chief  
Reactor Projects Section No. 1  
Reactor Operations and Nuclear  
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Date

1. Persons ContactedTennessee Valley Authority (TVA)

- \*J. Balletine, Plant Superintendent
- \*W. Andrews, Plant QA Staff Supervisor
- \*E. Condon, Preoperational Test Section Supervisor
- L. McCloud, Quality Assurance Engineer
- R. Smith, Electrical Engineer
- K. Hurt, Electrical Engineer
- J. Denver, Engineering Aide
- K. Weller, Electrical Engineer
- F. Siler, Instrument Engineer
- R. Fortenberry, Reactor Engineer

Westinghouse

R. Mathieson, Site Manager

The inspector also interviewed six other licensee employees during the course of the inspection. They included health physics, operations and QA section personnel.

\*Denotes those present at the Exit Interview.

2. Licensee Action on Previous Inspection Findings

Not Inspected.

### 3. Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, items of noncompliance, or deviations. An unresolved item disclosed during the inspection is discussed in Paragraph 5.

### 4. Exit Interview

The inspector met with Mr. J. Ballentine and members of the plant staff (as denoted in paragraph 1) on September 22, 1978. The inspector summarized, as reported in the following paragraphs, the findings of the inspection.

### 5. Conduct of W6.1B, SIS - Accumulator Blowdown Tests

The inspector reviewed portions of the Official Copy of W6.1B, SIS Accumulator Blowdown Tests, and talked with cognizant test engineers. The test documentation, which was partially complete, was reviewed for conformance to Regulatory Guide 1.68 (Preoperational and Initial Startup Test Programs For Water-Cooled Power Reactors), Section 14.1.1.1 (Preoperational Test Program) of the FSAR, and SQA14 (Sequoyah Nuclear Plant Preoperational Test Program). Several discrepancies in the official test record were discussed with the applicant:

- a. Test Changes 1 - 4 had not been reviewed by the Test Program Coordinator. Test Changes 2 - 4 were incomplete in that reasons for the change had not been completed.
- b. The Temporary Conditions Log (Appendix E to the Test Procedure) did not reflect the current condition of the temporary conditions in the plant established in support of W6.1B.
- c. The narrative test log (W6.1B(2) - Accumulator Test Log) did not document temporary conditions established for system testing when certain temporary conditions, not provided for by the Test Procedure Temporary Conditions Log, were established. The narrative test log did not identify Trouble Report (TR) numbers when a TR was generated, to facilitate traceability.
- d. The resolutions of Deficiencies DN-5,6,7 were not reflected in the Deficiencies and Exceptions (Appendix B) Section of the test procedure.
- e. Information concerning test equipment serial number and calibration data had not been recorded in Section 4 of the test procedure, for equipment used during the conduct of the test. The applicant had identified this discrepancy and had issued a Corrective Action Report.

These test conduct discrepancies have been identified as an Unresolved Item (78-31-01) pending discussion with the cognizant DPP test director and additional NRC review of the official test procedure copy at the time of the test's completion.

6. Conduct of TVA 13B(1), TVA Onsite AC Distribution System

The inspector reviewed portions of the Official Copy of TVA 13B(1), TVA Onsite AC Distribution System, witnessed portions of the conduct of the test, and interviewed the DPP test director. The test documentation review was made for conformance to Regulatory Guide 1.68, Section 14.1.1.1 of the FSAR, and SQA14. Conduct of parts of Section 5.1 of the test observed by the inspector included annunciator testing, blackout conditions load shedding, and sequential loading of Diesel Generator 1A-A under non-accident conditions.

The inspector determined that testing was conducted within administrative controls established by SQA14 and the TVA 13B(1) test procedure. Test discrepancies identified for Centrifugal Charging Pump 1A-A and Fire Pump 1A-A were identified and documentation initiated to assure corrective action. Annotation of brush recorder traces, the test narrative log, and the official copy of the procedures was consistent with administrative controls.

Within the areas inspected no discrepancies were identified.

7. Maintenance Activities Related to Preoperational Testing

The inspector reviewed nine Trouble Reports (TRs) for consistency with the administrative requirements of SQM1 (Sequoyah Nuclear Plant Maintenance System), SQM2 (Maintenance - Report Handling and History System), and SQA14. These TR's were recently issued and related to systems undergoing preoperational testing. Several other TR's were sought but could not be located (as they were believed to be in the process of being filed). The inspector did not identify any discrepancies and stated his intent to continue inspection of this area on a subsequent inspection.

8. Accumulator Blowdown Test Discrepancy

The inspector met with applicant and Westinghouse site personnel to discuss the test discrepancy identified during the accumulator blowdown testing. This discrepancy is an unexpected variation in accumulator discharge time with backpressure (due to the standing head of water in the reactor vessel/refueling canal during testing). It was reported by the applicant to the NRC as a potential construction deficiency pursuant to the provisions of 10 CFR 50.55(e) on September 18, 1978.

Testing by the applicant had revealed that with a reduction of backpressure to approximately 0 psig (by pumping the reactor vessel water level down to the cold leg nozzle) the accumulator blowdown time increased. It had been expected that the reduction in backpressure would decrease accumulator blowdown time.

The inspector and the applicant discussed this phenomena and determined that the accumulator discharge piping configuration was identical for all Sequoyah and Watts Bar units. The applicant stated that a Westinghouse design review had been initiated to correct this discrepancy for these TVA plants. The inspector will followup this item on a future inspection (78-31-02).

9. Temporary Storage of Fuel Assemblies

The inspector reviewed the applicant's program for temporary storage of 20 fuel assemblies, and inspected the physical facility used for storage. These new fuel assemblies had been stored in the spent fuel pool pursuant to the provisions of SNM license No. 176.

Spent Fuel Pool water testing necessitated the temporary removal of these assemblies. They were placed in a temporary storage facility in the cask loading area (706 - foot level) in accordance with Amendment 3 to the SNM license. The inspector confirmed that fuel handling and storage was consistent with the SNM license as amended and no discrepancies were identified.