



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

Report Nos.: 50-327/78-32, and 50-328/78-23

License Nos.: CPPR-72 and CPPR-73

Docket Nos.: 50-327 and 50-328

Categories: A3 and A2

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

Facility Name: Sequoyah Nuclear Plant, Units 1 and 2

Inspection at: Knoxville, Tennessee and Daisy, Tennessee

Inspection Conducted: September 21, 1978, at Knoxville, Tennessee  
September 22, 1978, at Daisy, Tennessee

Inspectors: J. R. Harris  
R. M. Compton

Other Accompanying Personnel: J. J. Lenahan (In Training)

Reviewed by: J. C. Bryant  
J. C. Bryant, Chief  
Engineering Support Section No. 1  
Reactor Construction and Engineering  
Support Branch

10/24/78  
Date

Inspection Summary

Inspection on September 21-22, 1978 (Report No. 50-327/78-32 and 50-328/78-23)

Areas Inspected: Licensee actions on previously identified items concerning under-strength concrete in Units 1 and 2 shield buildings; epoxy anchored bolts in concrete; deficient ERCW concrete cells; ERCW pipe cribbing. The inspection involved 24 inspector-hours by two NRC inspectors.

Results: No deviations or items of noncompliance were identified.

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DETAILS I

Prepared by:

R.M. Compton  
J. R. Harris, Civil Engineer/Geologist  
Engineering Support Section No. 1  
Reactor Construction and Engineering  
Support Branch

10/31/78  
Date

R.M. Compton  
R. M. Compton, Civil Engineer  
Engineering Support Section No. 1  
Reactor Construction and Engineering  
Support Branch

10/31/78  
Date

Dates of Inspection: September 21-22, 1978

Reviewed by:

J.C. Bryant  
J. C. Bryant, Chief  
Engineering Support Section No. 1  
Reactor Construction and Engineering  
Support Branch

10/21/78  
Date

1. Persons Contacted

Tennessee Valley Authority (TVA)

- \*S. Duhan, OEDC, QA
- \*R. D. Guthrie, CEB, ENDES
- \*R. W. Cannon, CEB, ENDES
- \*A. D. Soderberg, WMGT, GSB
- \*D. P. Ormsby, Regulatory Staff
- \*G. M. Given, CEB, ENDES
- \*D. E. Martin, CDB
- \*J. H. Coulson, CDB
- \*R. E. Harris, CDB
- \*M. A. Cones, CDB
- \*R. E. Bullock, CDB
- \*G. L. Ford, MDB
- \*W. I. Dothard, MEB-ENDES
- \*\*G. G. Stack, Project Manager
- \*\*D. W. Mack, Assistant Construction Engineer
- \*\*R. W. Farrell, QCR, Supervisor, Construction
- \*\*R. W. Olson, Assistant Construction Engineer
- \*\*R. C. Miles, Supervisor, Office and Civil Engineering Unit
- W. Jolly, Civil Engineer, QC Inspector
- T. Wright, Civil Engineer

\*Denotes those present at the exit interview in Knoxville on September 21, 1978.

\*\*Denotes those present at the Sequoyah site exit interview on September 22, 1978

2. Licensee Action on Previous Inspection Findings

- a. (Closed) Unresolved Items (77-21-03 and 77-30-02 and licensee identified item 78-01-13): Epoxy Anchored Bolts in Concrete. The inspectors reviewed the licensee's final report dated July 12, 1978, discussed the test program initiated to verify acceptability of epoxy anchored bolts with responsible engineers and reviewed resulting data from the test program. This item is closed.
- b. (Open) Item (327/78-09-03 and 328/78-06-05): Deficient ERCW Concrete Cells. TVA notified RII on June 14, 1976 that cells E and F of the ERCW pumping station access roadway had questionable concrete and was not founded on bedrock. The inspector discussed the subject item with responsible ENDES and CDB personnel and reviewed TVA's final report dated August 1, 1978, and report backup data. Discussions with responsible engineers and review of boring data indicated the report is not clear in the description of the problem and that the report does not address soft concrete in cells D and F shown by postplacement borings. This item remains open pending RII:IE review of a resubmitted final report clarifying the description of the problem and corrective action regarding soft concrete in cells D and F.
- c. (Open) Item (328/78-01-14): Shield Buildings Interior Surface Strength. TVA notified RII on December 16, 1977, of understrength concrete on the interior of the Unit 2 shield building. RII:IE Report Nos. 50-327/77-30 and 50-328/77-21 identified understrength concrete problems in both Units 1 and 2 shield buildings. The inspectors discussed TVA's final report dated July 21, 1978, and its supporting data with responsible TVA engineers at Knoxville and the construction site. The inspectors examined a test core from the Unit 2 shield building and proposed locations of test borings in Units 1 and 2 shield buildings. This item remains open pending RII:IE review of the test boring program results.
- d. (Open) Unresolved Item (328/78-18-01): ERCW Pipe Cribbing. Re-examination of the pipe trench due to a change in design criteria revealed cribbing had been left in place when the pipe trench was backfilled and compacted. Removal of the cribbing showed damage to the protective coating and the licensee issued NCR 1098. The inspector requested the licensee furnish RII:IE the following data: specifications on backfill materials and compaction requirements, pertinent drawings, applicable coating requirements, and QC records on the pipe installation - civil and mechanical. This item remains open pending RII:IE review of the above data and the licensee's disposition of NCR 1098.

3. Exit Interview

Exit interviews were held with the licensee representatives denoted in paragraph 1 at the TVA corporate offices in Knoxville on September 21, 1978, and at the Secuoyah site on September 22, 1978. The licensee was apprised of the scope of the inspection which included examination of action on previously identified items on understrength concrete, expansion anchors, deficient ERCW cells and ERCW pipe cribbing. No deviations or items of noncompliance were disclosed.