



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA ST., N.W., SUITE 3100  
ATLANTA, GEORGIA 30303  
FEB - 3 1981

Report Nos. 50-553/80-18 and 50-554/80-16

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

Facility Name: Phipps Bend Nuclear Plant, 1 and 2

Docket Nos. 50-553 and 50-554

License Nos. CPPR-162 and CPPR-163

Inspection at Phipps Bend site near Kingsport, Tennessee

Inspector: J. R. Harris for

2-3-81  
Date Signed

Approved by: T. E. Conlon  
T. E. Conlon, Section Chief, RCES Branch

2-3-81  
Date Signed

SUMMARY

Inspection on December 17-19, 1980

Areas Inspected

This routine, unannounced inspection involved 22 inspector-hours on site in the areas of foundations, spray ponds and structural concrete.

Results

Of the three areas inspected, no violations or deviations were identified in two areas; one violation was found in one area (Failure to place reinforcing steel in accordance with procedure and drawing requirements - paragraph - 5).

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## DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*W. K. Kelleghan, Project Manager
- \*G. W. Wadewitz, Construction Manager
- \*J. C. Coffield, Assistant Construction Engineer, Project Engineer
- G. W. Hogg, Supervisor Materials QC
- \*J. Mauro, Supervisor Civil QC
- \*R. C. Young, Civil QA Engineer
- \*M. Alva, QA Engineer
- D. E. Hitchcock, Supervisor, Site QA Unit
- \*T. V. Abbitiello, Assistant Construction Engineer, QC
- R. W. Lawson, Civil Engineer, QC
- E. Lambert, Civil QC Inspector

Other licensee employees contacted included three technicians.

\*Attended exit interview

### 2. Exit Interview

The inspection scope and findings were summarized on December 19, 1980 with those persons indicated in Paragraph 1 above.

### 3. Licensee Action on Previous Inspection Findings

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Independent Inspection

The inspector examined the following areas:

- a. Concrete and soils testing laboratory
- b. Prepour inspection for concrete pour number KAC01-34, 37, 40, 43,
- c. Control of nonconformance reports
- d. Audit number PB-G-80-16

Examination of the above disclosed the following inspector identified items:

- a. TVA procedure QCI 207 and drawing number 4KE0401-5K-11-R require vertical reinforcing steel on concrete pour number KAC01-34, 37, 40, 43 in the intake pumping station to be placed at 12 inch centers with a plus or minus tolerance of 2 inches. During examination of prepour inspection controls for pour number KAC01-34, 37, 40, 43 the inspector observed that the vertical steel was not placed in accordance with the plus or minus tolerance specified in procedure and drawing requirements. The pour card had been signed off for final inspection and concrete was enroute for placing. After identifying the problem to the QC Materials Engineer Supervisor, the placement was cancelled prior to placing of concrete. QCIR's 21952, 21953, and 21954 were written on the subject and related concrete placements.

Failure to place reinforcing steel in accordance with drawing and procedure requirements was identified to the licensee as violation number 50-553/80-18-01, 50-554/80-16-01.

- b. Discussions with responsible QA engineers and examination of nonconformance reports disclosed that most nonconformance reports, which are not considered "significant" by the licensee, are not addressing cause as required by procedure requirements. In Phipps Bend Audit number PB-G-80-16, Nonconformance Control" completed December 17, 1980, the licensee identified failure to address cause on nonconformance reports as an audit finding. Addressing of cause of nonconformances which are not considered significant by the licensee is a TVA commitment and is not required by 10 CFR Appendix B.

Addressing cause on nonconformance reports was identified to the licensee as Inspector followup item 50-553/80-18-02 and 50-554/80-16-02.

No deviations were identified.

#### 6. Foundations - Review of Quality Records Units 1 and 2

The inspector examined quality records for granular fill in Units 1 and 2 diesel generator building, Unit 2 control building and fuel building oil storage tanks. Acceptance criteria examined by the inspector appear in the following documents:

- a. Section 2.5 and 3.8.5 of the PSAR
- b. Specification G-2, Plain and Reinforced Concrete
- c. Specification G-9, Rolled Earthfill for Dams and Power Plants

- d. Specification N7C-876, Construction Specification for Earth and Rock Foundations and Fills
- e. Procedure QCI C-106, Foundations and Fills, Engineered Granular Material Placement and Compaction Testing

Records examined by the inspector included fill placement, daily inspection records and test data for relative density, average relative density and gradations.

No violations or deviations were identified.

7. Lakes, Dam and Canals - Observation of Quality Records, Units 1 and 2

The inspector examined earthfill quality records on the Unit 1 and 2 spray pond liner. Acceptance criteria examined by the inspector in addition to those listed in paragraph 6 are:

- a. Procedure QCI C - 101, Earthfill, Daily Inspection
- b. Procedure QCI C - 102, Earthfill Control Testing
- c. Procedure QCI C - 108, Earthfill Block Sampling

Records examined by the inspector included, earthfill daily inspection records, compaction test data, atterberg limit test data, test logs, and earthfill graph calibration records for 1980.

No violations or deviations were identified.