



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

Report Nos. 50-518/82-09, 50-519/82-08, 50-520/82-09 and 50-521/82-08

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

Facility Name: Hartsville Nuclear Plant

Docket Nos. 50-518, 50-519, 50-520 and 50-521

License Nos. CPPR-150, CPPR-151, CPPR-152 and CPPR-153

Inspection at Hartsville site near Hartsville, Tennessee

Inspector: James W. Chase for 7/16/82
J. F. Schapker Date Signed

Approved by: F. S. Cantrell 7/16/82
F. S. Cantrell, Section Chief, Division of Date Signed
Resident and Reactor Inspection

SUMMARY

Inspection on June 1-4, 28-30, 1982

Areas Inspected

This routine, announced inspection involved 37 inspector-hours on site in the areas of seismic category 1 concrete (Unit A-1), open items (all units), independent inspection effort (A-1 and A-2), and site deferral preparation (A-1 and A-2).

Results

Of the 4 areas inspected, no violations or deviations were identified.

DETAILS

1. Persons Contacted

Licensee Employees

- *W. T. Quinn, Site Construction Engineer
- J. W. Henry, Unit Supervisor, QC Welding
- H. S. Sheppard, Assistant Construction Engineer, Quality Control
- F. E. Laurent, Unit Supervisor, STRIDE Mechanical Project Engineering
- G. A. Gonsalves, QA Unit Supervisor
- B. F. Huffaker, Supervisor, Materials QC Unit

Other licensee employees contacted included document control personnel, construction craftsmen, QC technicians, and project engineers.

*Attended exit interview

2. The inspection scope and findings were summarized with the Site Project Manager/or his representative on June 4, and 30, 1982.

3. Licensee Action on Previous Inspection Findings

These items were not reviewed.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Independent Inspection Effort

The inspector made two surveillance tours during which the status of project work was noted, and construction and deferral activities were inspected on nuclear safety-related structures, systems and components.

The inspections included:

- a. Open items control: Newly issued Nonconformance Reports (NCR's), and QA unit audit findings were reviewed for pertinence to the inspection program and for adequacy of corrective action.
- b. Preventive maintenance and protection of safety-related equipment installed and in plant storage was observed in plant A-1 auxiliary building, fuel building and reactor building. Observations made included: electrical switchgear, transformers, electrically actuated valves and pumps. These items were observed for adequacy of protective covers, heaters installed and actuated and periodic maintenance performed in accordance with applicable specifications.

- c. The inspector observed corrosion on the reactor vessels carbon steel nozzles interior. The corrosion was discovered as a result of a question by the inspector as to the adequacy of the nozzle cover seals which had visually deteriorated on the outside diameter. (Reference report 50-518 thru 521/82-06). The licensee stated the seals are adequate and are only deteriorated on the OD. The corrosion is due to inadequate storage procedures which have been revised.

The licensee has issued a nonconformance report and is consulting with the vendor supplier to effect corrective action. The inspector will review corrective action taken and has requested notification to witness corrosion removal and application of protective coatings if applied. This item is identified as inspector follow up item (518, 519, 520, 521/82-09-01) Corrosion of Reactor Vessels I.D.

Within the areas inspected no violations or deviations were identified.

6. Licensee Identified 50.55(e) Items

The following interim reports were received from the licensee on previously identified items. The inspector reviewed these reports and found that none contained information that would permit closure. Follow on reports are scheduled at later dates.

(Open) 518, 520/82-07; 519, 521/82-06 Regional quality engineering branch inspection office manpower.

Next scheduled report September 16, 1982.

(Open) 518, 519, 520, 521/80-27-01 Link rod assembly - Delaval Diesels (NCR Delaval Diesels No. 1)

Next scheduled report indefinite due to construction deferral.

(Open) CDR 518/81-15, 519/81-11, 520/81-13, 521/81-11 Reactor core isolation cooling steam line break.

Next scheduled report indefinite due to construction deferral.

(Open) CDR 518/82-08, 519/82-07, 520/82-08, 521/82-07 Check Valve Leak in air start of standby diesel generators.

Next scheduled report indefinite due to construction deferral.

7. Seismic Category I Concrete

Forming, prepouring inspection, placements and post placement curing were inspected as work continued in the A plant fuel building. Specific placements designations A1F-111 and A1F-40E, 20H for a total of 208 cubic yards placed.

Preplacement inspection was indicated by the properly signed pour card. Placement of reinforcing steel conformed to drawing and procedure requirements. Placement activities pertaining to delivery time, freefall, flow distance, layer thickness and consolidation vibration practices conformed to specifications.

Samples for temperature, slump, air content, unit weight and test cylinders were made in accordance with procedure requirements. Post placement inspection observations showed proper curing was in progress.

During observations of activities for structural concrete in these areas, conformance with the requirements of C. F. Braun Specification 300-0, Revision 8, "Concrete", TVA Construction Specification G-2, QCI C-201, Revision 4, and CEP 9.02, Revision 5, was verified by the inspector.

Within the areas inspected no deviations or violations were identified.

8. Review of Deferral Activities.

The inspector toured the site to observe activities for preservation of material and equipment during deferral. Protective sealing of concrete rubber or polyvinyl chloride (PVC) waterstops partially embedded in concrete and installed anchor bolts is in process. The temporary containment cover has been installed on Unit A-1, the cover for unit A-2 is in the process of fabrication. Concrete slurry application to exposed rebar (12 to 24 inches) was observed on Unit A-1 containment. A quality assurance program for the deferred nuclear units has been requested by the Division of Licensing staff, and is in the process of formulation by the Licensee.