



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

Report No.: 50-364/78-20

Docket No.: 50-364

License No.: CPPR-86

Category: A2

Licensee: Alabama Power Company  
Post Office Box 2641  
Birmingham, Alabama 35291

Facility Name: Joseph M. Farley Plant, Unit 2

Inspection at: Ashford, Alabama

Inspection conducted: December 11-14, 1978

Inspector: B. R. Crowley

Reviewed by:

*T. E. Conlon*

T. E. Conlon, Chief  
Engineering Support Section No. 2  
Reactor Construction and Engineering  
Support Branch

*1/5/79*  
Date

Inspection Summary

Inspection on December 11-14, 1978 (Report No. 50-364/78-20)

Areas Inspected: Pre-service inspection program, procedures and inspection activities; housekeeping. This inspection involved 30 inspector-hours on-site by one NRC inspector.

Results: Of the four areas inspected, no apparent items of noncompliance or deviations were identified in three areas, one apparent item of noncompliance (deficiency-lack of written procedures defining responsibilities for PSI, Details, paragraph 5 was identified in one area).

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## DETAILS

Prepared by: B. R. Crowley  
 B. R. Crowley, Metallurgical Engineer  
 Engineering Support Section No. 2  
 Reactor Construction and Engineering  
 Support Branch

1/4/79  
 Date

Dates of Inspection: December 11-14, 1978

Reviewed by: T. E. Conlon  
 T. E. Conlon, Chief  
 Engineering Support Section No. 2  
 Reactor Construction and Engineering  
 Support Branch

1/5/79  
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1. Persons Contacteda. Alabama Power Company (APCO)

- \*J. D. Woodard, Assistant Plant Manager
- D. Morey, Maintenance Supervisor
- \*D. L. Vines, Level III Examiner
- M. Brown, Engineer
- \*F. A. Wurster, Operations QA Engineer
- \*D. L. Cox, Operations QA Engineer

b. Contractor Organizations(1) Southern Company Services (SCS)

\*T. B. Caudle, Pre-Service/In-Service Coordinator

(2) Westinghouse Electric Corporation, Nuclear Energy Systems, Nuclear Services Division (W-NSD)

\*L. W. Lunden, Site Coordinator  
 J. E. Duvall, Shift Supervisor

(3) Zetec, Inc.

T. S. Beiers, Level IIA Examiner

\*Denotes those present at the exit interview.

2. Licensee Action on Previous Inspection Findings

Actions on previous findings were not examined during this inspection.

3. Unresolved Items

No unresolved items were identified during this inspection.

4. Independent Inspection Effort

A general walk-through inspection of the reactor building was made. General housekeeping and overall construction activities were observed.

In the areas inspected, no items of noncompliance or deviations were identified.

5. Pre-Service Inspection - Review of Program

The inspector reviewed the licensee's pre-service inspection (PSI) program in the areas of program approval and QA program requirements, including organizational structure and audit requirements. Except for the steam generator Eddy Current tube inspection, the applicable code for the PSI is the ASME Boiler and Pressure Vessel Code, Section XI, 1974 Edition, with addenda through the Summer of 1975, as required by paragraph 5.2.8 of the FSAR.

The applicable code for the steam generator tube Eddy Current inspection is Appendix IV to the Summer of 1976, addenda to Section XI.

The documents reviewed included:

- a. "Westinghouse Examination Program for Pre-Service Inspection for Class 1 and 2 Components FNP-78-1362", and APCO approval letter dated November 30, 1978

Note

Program was not complete - sketches had only been issued for some Class 2 lines

- b. "Westinghouse Examination Program for Pre-Service Eddy Current Inspection of Steam Generators FNP-78-1364" and APCO approval letter dated November 30, 1978
- c. W-NSD procedure OPR-610-3, Revision 0
- d. W-NSD procedure MRS 2.4.2 GEN-18, Revision 0
- e. W-NSD "QA Program Plan", NSD-PA-001, Revision 3

## f. APCO Operating Quality Assurance (OPC) Administrative Procedures:

- (1) OQA-AP-01, Revision 8
- (2) OQA-AP-05, Revision 2
- (3) OQA-AP-06, Revision 4
- (4) OQA-AP-07, Revision 8
- (5) OQA-AP-10, Revision 10
- (6) OQA-AP-09, Revision 8
- (7) OQA-AP-11, Revision 11

## g. APCO OQC Work Procedures:

- (1) OQA-WP-23, Revision 0
- (2) OQA-WP-29, Revision 0

During review of the licensee's program for the control of PSI, the inspector found that certain of the licensee's organizational responsibilities are not adequately defined by written procedures. There is no procedure defining who has the overall responsibility for pre-service inspection. The pre-service/in-service coordinator, who works for SCS, performs certain review and approval recommendation functions as well as overall coordination and surveillance. None of his responsibilities to the pre-service/in-service program are defined by procedure. An APCO Level III examiner also performs certain review and approval recommendations as well as surveillance during inspections. His responsibilities are not defined by written procedures. Discussions with APCO indicate that the Operations Maintenance Supervisor has the overall responsibility for pre-service/in-service inspection. However, this responsibility is not delineated in writing nor is his interface with the above personnel or the pre-service/in-service contractor described by procedure. This lack of written definition of pre-service responsibilities appears to be in noncompliance with Criterion I of Appendix B to 10 CFR 50, which states in part, "The authority and duties of persons and organizations performing activities affecting the safety-related functions of structures, systems and components shall be clearly established and delineated in writing. These activities include both the performing functions of attaining quality objectives and the quality assurance functions." At the exit interview, the licensee stated that he considered that all authority and responsibilities were adequately defined in APCO administrative procedures - AP-1, Section 10; AP-3, Sections 5.1.2 and 5.6.5; and AP-15, Section 2.6. The inspector reviewed the aforementioned procedures and concluded that the personnel responsibilities for PSI are not adequately defined in writing. Therefore, this is a deficiency and is identified as item 364/78-20-01.

In the areas inspected, no items of noncompliance, except as noted in the above paragraph, or deviation were identified.

## 6. Pre-Service Inspection - Review of Procedures

The inspector reviewed the pre-service inspection procedures indicated below relative to Eddy Current inspection of steam generation tubes to determine whether the procedures were consistent with regulatory requirements and licensee commitments. See paragraph 5 above for the applicable code.

The following procedures were reviewed:

- . W-NSD Procedure MRS 2.4.2 GEN-18, Revision 0, "Eddy Current Inspection of Steam Generator Tubing - Pre-Service and In-Service"
- . Technical Supplement No. 1, Revision 2 to Procedure MRS 2.4.2 GEN-18, "Steam Generator Tubing Inspection for Tube Wall Degradation - Detection and Quantification"

These procedures were reviewed in the areas of:

- a. Procedure approval, requirements for qualification of NDE personnel and procedure scope.
- b. Procedure technical content relative to; specification of two channel examination unit and indication equipment, establishment of criteria for maximum sensitivity, description of examination method, description of calibration method and sequence, description of calibration block, and reference to acceptance standards.
- c. Compilation of required records such as examination results and data sheets, tapes, equipment data, calibration data sheets and calibration block data.

In the areas reviewed, no items of noncompliance or deviations were identified.

## 7. Pre-Service Inspection - Observation of Work and Work Activities

The inspector observed the pre-service activities described below relative to steam generator tube Eddy Current inspection to determine whether these activities were being performed in accordance with regulatory requirements and licensee procedures. See paragraphs 5 and 6 above for the applicable code and procedures.

- a. Personnel qualification records for three Level I and three Level II examiners were reviewed.
- b. In-process Eddy Current examinations, including the calibration sequence, was observed for tubes C15-R6, C15-R7, C15-R8, C15-R9,

C15-R10 and C15-R11 on the inlet side and tubes C83-R25, C83-R26, C83-R28, C83-R29 and C83-R30 on the outlet side of steam generator "A". The inspection was compared with the applicable procedures in the following areas:

- (1) Program and procedures being followed
- (2) Personnel familiar with examination methods
- (3) Administrative controls for examination execution, alterations and records
- (4) Reference points clearly defined for future inspections
- (5) Use of two channel examination equipment
- (6) Use of maximum sensitivity as required
- (7) Calibration requirements
- (8) Percentage of tube coverage during examination
- (9) Acceptance criteria

In the areas inspected, no items of noncompliance or deviations were identified.

#### 8. Exit Interview

The inspector met with licensee representatives denoted in paragraph 1 at the conclusion of the inspection and summarized the scope and findings of the inspection. The inspection included housekeeping and pre-service inspection program, procedures and activities. The noncompliance of paragraph 5 was discussed and the licensee stated that at this time they did not agree with the noncompliance.