



UNITED STATES
 NUCLEAR REGULATORY COMMISSION
 REGION II
 101 MARIETTA STREET, N.W.
 ATLANTA, GEORGIA 30323

Report No.: 50-261/85-12

Licensee: Carolina Power and Light Company
 411 Fayetteville Street
 Raleigh, NC 27602

Docket No.: 50-261

License No.: DPR-23

Facility Name: H. B. Robinson

Inspection Conducted: February 26 - March 1, 1985

Inspector: *W. V. Kleinsorge*
 W. V. Kleinsorge

March 7, 1985
 Date Signed

Approved by: *E. J. David for J. J. Blake*
 J. J. Blake, Section Chief
 Engineering Branch
 Division of Reactor Safety

3/7/85
 Date Signed

SUMMARY

Scope: This routine, unannounced inspection entailed 32 inspector-hours on site in the areas of licensee action on previous enforcement matters (92702B), service water degradation (92706B), inservice testing of pumps and valves and IE Bulletins (IEB) (92703B).

Results: One violation was identified - 261,85-05 - "Failure to provide adequate IST procedure" - paragraph 7a.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *R. E. Morgan, Plant General Manager
- *W. Flanagan, Manager, Engineering and Design
- *R. Wallace, Director of Onsite Nuclear Safety
- *J. Curley, Manager of Technical Support
- *D. Stodler, Director of Regulatory Compliance
- *J. Young, Director of Quality Assurance/Quality Control
- *C. Wright, Sr. Specialist Regulatory Compliance
- *R. Chambers, Supervisor - Performance Engineering
- *W. Farmer, Sr. Engineer - Inservice Inspection
- *C. Hawley, Project Engineer - Plant Engineering

Other licensee employees contacted included construction craftsmen, engineers, technicians, operators, and office personnel.

NRC Resident Inspectors

- *H. Krug
- *H. Whitcomb

*Attended exit interview

2. Exit Interview (30703B)

The inspection scope and findings were summarized on March 1, 1985, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings listed below. No dissenting comments were received from the licensee.

(Open) Violation 261/85-12-01: "Failure to Provide Adequate IST Procedure" - paragraph 7a.

The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspector during this inspection.

3. Licensee Action on Previous Enforcement Matters (92702B)

(Closed) Violation 261/84-48-01: "Failure to Establish Adequate Measures to Protect Stainless Steel".

Carolina Power and Light (CP&L) letter of response dated January 25, 1985 has been reviewed and determined to be acceptable by Region II. The inspector held discussions with the responsible engineers and examined the corrective actions as stated in the letter of response. The inspector

concluded that CP&L had determined the full extent of the subject noncompliance, performed the necessary survey and follow-up actions to correct the present conditions and developed the necessary corrective actions to preclude recurrence of similar circumstances. The corrective actions identified in the letter of response have been implemented.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Independent Inspection Effort (92706B)

The inspector conducted a general inspection of the protected area, the laydown area and the fabrication shop to observe activities such as welding, material handling and control, housekeeping and storage.

Within the areas examined, no violations or deviations were identified.

6. Services Water Piping Degradation (92706B)

a. Background

The degradation of the service water system is described in NRC Report 261/84-45. Additional inspection in this area is reported in 261/84-48. This inspection is a continuation of the inspection described in the above reports.

The licensee committed in CP&L letter RESP/84-1267 dated January 4, 1985, to an inservice monitoring program to include 15 welds that would represent a variety of configurations, lengths of corrosion (microbiological attack) and sleeved as well as nonsleeved joints. These joints were to be radiographed (baseline) prior to start up and re-radiographed (inservice monitoring) in six weeks \pm one week. Should no further attack be identified the next radiographic examination would be scheduled three months \pm two weeks later.

The licensee radiographed fifteen weld joints (baseline) on December 12, 1984, (except for 2S03-2 radiographed on November 19, 1984) and re-radiographed the same 15 weld joints on February 26, 1985.

b. Inspections

The inspector reviewed the radiographs that had been taken, 15 joints (baseline) and the same 15 joints (inservice monitoring). The licensee informed the inspector that the above radiographs were for information only. Therefore, no attempt was made to provide code quality radiographs, as only corrosion growth was required to be determined. The inspector reviewed the radiographs to determine whether there had been any corrosion growth between the baseline radiographs of 12/28/84, and the inservice monitoring radiographs of 2/26/85, the results of this examination are shown below.

<u>Weld Number</u>	<u>Location</u>	<u>Remarks</u>
4SPA-5	Auxiliary Bldg.	_____
1RPA-4	" "	_____
4RPA-4	" "	_____
3RCH-1	" "	_____
3SCH-2	" "	Increment 2-3, of the 2/26/85 radiographs, has some of the corrosion indications obscured by the image of the lead number joint identification.
3RCH-2	Auxiliary Building	Increment 2-0, of the 2/26/85 radiographs, is missing.
2RCH-8	Auxiliary Building	Increment 2-0, of the 2/26/85 radiographs, does not have sufficient clarity to determine whether additional corrosion had taken place.
3SCH-5	Auxiliary Building	December 28, 1984 baseline radiograph, increment 1-2, two film were mottled and the third too dark to evaluate (density 4.65+), 2/26/85 radiograph increment 1-2 contained corrosion indications not detectable in the 12/28/84 film due to the poor quality of the 12/28/84 film.
3S03-1	Containment	Increment 1-2, of the 2/26/85 radiographs, has some of the corrosion indications obscured by the image of the lead number joint identification.
2N33	Containment	Increment 1-2, in the 12/28/84 baseline radiographs, is too dark to interpret (density 4.5+).

30-2	Containment	Increment 2-0, in the 12/28/84 baseline radiographs, does not include the fabrication joint, therefore, the original corrosion locations can not be determined.
20-1	Containment	_____
2N32	Containment	Increment 2-0, in the 12/28/84 baseline radiographs, is too dark to interpret (density 4.5+).
2S03-2	Containment	Increment 0-1, in the 2/26/85 radiographs, has the image of the lead identification numbers in the area of interest.
		Increment 1-2, in the 2/26/85 radiographs, has smaller corrosion indications than the same increment in the 11/19/84 radiographs due to the use of a different radiographic technique.
3S03-2	Containment	The film presented to this inspector was marked 3S03-2 dated 12/28/84 and contained weld profiles and indications identical to film marked 2S03-2 dated 11/19/84 and 2/26/85. It appears that this radiographic set was erroneously marked 3S03-2 when infact it should have been marked 2S03-2.

The inspector could not identify any indications of corrosion that had increased in size from the baseline radiographs of 12/28/84, to the inservice monitor radiographs of 2/26/85, (the only exception was the 11/19/84 radiographs for 3SCH-5 and 2S03-2 which are explained by film quality radiographic technique differences). There are 13 examples of missing, obscured, unclean, and excessively dense (too dark) radiographs which do not provide adequate baseline or inservice monitoring information to determine corrosion growth. The above 13 increments represent only approximately 10% of the radiographs (baseline and inservice monitoring) that were made. In view of the fact that the remaining 90% did not exhibit

any indication of corrosion growth, and that the licensee has committed to repeat this examination in approximately 90 days there appears to be an acceptable margin of safety for the service water system integrity at the present time.

7. Inservice Testing of Pumps and Valves

The inspector reviewed procedures, observed work activities, and reviewed records as described below, to determine whether applicable code, procedure, and regulatory requirements were being met. The applicable code for Inservice Testing (IST) of pumps and valves is ASME Boiler and Pressure Vessel (B&PV) Code Section XI, 1977 Edition with Addenda through Summer 1978.

- a. The inspector reviewed the below listed procedures in the following areas: general technical and administrative adequacy; plant equipment status; description of hydraulic circuit; location and type of each measurement for each quantity; allowable ranges for test quantities; minimum flow and/or pressure for pump to fulfill safety function; minimum system operation time; realignment of hydraulic circuit; plant equipment status changes properly identified; review of test results and recording requirements.

Procedures Reviewed

<u>Procedure No.</u>	<u>Title</u>
OST-108, Rev. 4	"Boric Acid Pumps Inservice Inspection (Monthly)"
OST-251, Rev. 3	"RHR Component Test (monthly)"

With regard to the examination above, the inspector noted that CP&L Procedure OST-108, Revision 4, "Boric Acid Pumps Inservice Inspection (monthly)", does not require that the pump and system be allowed to stabilize for five minutes prior to taking the required data, (Suction Pressure, Delta P and Vibration Amplitude). ASME Section XI, 1977 Edition with Addenda through Summer 1978, paragraph IWP 3500(a) Duration of Test, requires each pump to be run five minutes under conditions as stable as the system permits prior to making the required observations or measurements. Therefore, the procedure is inadequate in that the procedure does not comply with the code in the area inservice pump test duration. Failure to provide adequate procedures for the accomplishment of activities affecting quality is in violation of 10 CFR 50, Appendix B, Criterion V. This violation will be identified as 261/85-12-01: "Failure to Provide Adequate IST Procedure".

- b. The inspector observed the testing of "B" Boric Acid Pump to determine compliance with procedure requirements.
- c. The inspector reviewed records for the below listed instruments to verify implementation of test requirements for test instrumentation in the following areas: specific instruments; area used; proper calibration frequency; calibration records; demonstrate accuracy as required by code and proper scale range.

Instruments

<u>Instrument ID</u>	<u>Associated Pump Test</u>
PI-110	"B" Boric Acid
PI-105A	"A" Boric Acid
LI-108/LT-108	"B" Boric Acid
LI-106/LT-106	"A" Boric Acid
B41711850	"A & B" Boric Acid
PI-600	"B" RHR
PI-601	"A" RHR

Within the areas examined, no violation or deviations were identified except as noted in paragraph 7a.

8. IE Bulletins (IEB) (92703B)

- a. (Closed) IEB No. 83-06, "Nonconforming Materials Supplied by Tube-Line Inc.," Unit 2.

The inspector reviewed CP&L letter of November 18, 1984, and determined that the requested actions of the Bulletin had been acceptably addressed. The inspector held discussions with responsible CP&L representatives, reviewed supporting documentation and observed representative samples of work to verify that the actions identified in the letter of response have been completed. This matter was left open in report 261/84-48 pending NRC review of metallurgical data and back-up documentation that are located at the Harris E&E Center. That review has been completed. This matter is considered closed.

- b. (Closed) IEB No. 83-07, "Apparently Fraudulent Products Sold by Ray Miller Inc.," Unit 2.

The inspector reviewed CP&L letters of March 23, June 1, and November 9, 1984 and January 31, 1985, and determined that the requested actions of the Bulletin have been acceptably addressed. The inspector held discussions with responsible CP&L engineers, reviewed support documentation and observed representative samples of work to verify that the actions identified in the letters of response have been completed. This matter is considered closed.