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

Report Nos. 50-325/81-10 and 50-324/81-10

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

Facility Name: Brunswick

Docket Nos. 50-325 and 50-324

License Nos. DPR-62 and DPR-71

Inspection at Brunswick site near Southport, NC

Inspector: J. J. Blake — 6/22/81
J. J. Blake — Date

Approved by: [illegible] — 6/25/81
A. R. Herdt, Section Chief, EI Branch — Date
Division of Engineering and Technical
Inspection

SUMMARY

Inspection on May 5-8 and 12-15, 1981

Areas Inspected

This routine, unannounced inspection involved 55 inspector-hours onsite in the areas of Previous Inspection Findings; IE Bulletins; Maintenance welding; and Inservice Inspection Program, work observation and records.

Results

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

DETAILS

1. Persons Contacted

Licensee Employees

*D. Allen, QA Supervisor
*A. Bishop, Engineering Supervisor
*J. Bishop, Project Engineer
C. Dietz, General Manager
*R. Morgan, Plant Operations Manager
*S. Bohannon, Regulatory Specialist
R. Coburn, QA Supervisor
*J. Hewett, ISI Coordinator
R. Poulk, Regulatory Specialist
W. Triplett, Administrative Manager
*W. Tucker, Technical and Administrative Manager
R. White, QA Specialist

Other licensee employees contacted included several technicians, maintenance mechanics, security force members, and office personnel.

Other Organizations

Southwest Research Institute

R. Fine, Team Leader
J. Agold, Team Engineer
T. Mances, QA Representative

NRC Resident Inspectors

*D. Johnson, Senior Resident
L. Garner, Resident

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on May 15, 1981 with those persons indicated in Paragraph 1 above. The licensee agreed to provide a supplemental response to IE Bulletin 80-08 (See discussion in Paragraph 5) and to submit a relief request for the postponement of the reactor vessel nozzle weld inspections (see paragraph 7). The inspector also discussed the licensee's ISI program submittal of March 2, 1981 and the impact that working to the 77S78 edition of Section XI would have on the plant. (See Paragraph 6)

3. Licensee Action on Previous Inspection Findings

a. (Closed) Infraction (50-325/80-23-01; 50-324/80-20-01) Inservice Inspection Program Incomplete. CP&L's letter of response dated July 11, 1980 has been reviewed and determined to be acceptable by Region II. The inspector held discussions with site engineering personnel 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 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.

b. (Closed) Unresolved Item (50-325/80-23-02; 50-324/80-20-02) Status of BK2 Inspections. This item was discussed with the licensee's ISI coordinator. He has documented the IEB 79-14 inspections of piping supports to provided the necessary BK2 inspections for the 40 month inspection interval.

c. (Open) Infraction (50-325/80-23-03; 50-324/80-20-03) ASME Section XI Surveillance Procedures Not Established. CP&L's letters of July 11 and August 11, 1980 have been reviewed and determined to be acceptable by Region II. The inspector held discussions with the site QA and engineering personnel concerning the site procedures necessary to correct the item of noncompliance. In that the QA organization at the site is being reorganized, the QA Procedure No. 23 (QAP-23) will not properly describe the QA functions involving ISI. The inspector was assured that QAP-23 is scheduled for revision along with all the other site QAPs. (The reorganization is scheduled to be effective on May 29, 1981.) The inspector also reviewed the draft of the administrative procedure which the licensee committed to complete by July 1, 1981. The inspector pointed out that the procedure does not address the repair and replacement aspects of Section XI nor does it require that baseline or preservice inspections be conducted on welds, valves and pumps after maintenance operations which could effect the baseline data.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. IE Bulletins

The inspector reviewed the licensee's response and action for the following IE Bulletins:

a. (Closed) IEB 80-07, BWR Jet Pump Assembly Failure. CP&L's letters of response Serial No. NO-80-601 dated April 24, 1980 and Serial No. NO-80-1050 dated July 15, 1980 have been reviewed

and determined to be acceptable by Region II. Region II inspection of licensee procedures and inspection plans for this bulletin was documented in Inspection Report No. 50-324/80-20 and 50-325/80-23.

b. (Open) IEB 80-08, Examination of Containment Liner Penetration Welds. CP&L response to this bulletin, (Serial: NO-80-971 dated July 3, 1980) reported that Brunswick did have the flued head type of penetration, with backing ring welds. The letter further stated that the welds in question were accepted by radiography, and that no documentation is available to indicate if repairs were required during construction. The inspector reviewed the fabrication and installation documentation for the penetrations and found that whereas the fabrication and installation specification originally required radiography, the NDE requirements for the feedwater penetrations and some of the RHR penetrations were changed to allow ultrasonic inspection. The inspector also noted that repair documentation was available for some of the welds in question.

The inspector discussed these findings with personnel involved with preparation of the original response, and it appears that there was some misunderstanding of what information was required during the original review. After this discussion, the licensee agreed to re-review the fabrication and installation records for the penetrations and to provide an amended response to the bulletin.

6. Inservice Inspection, Review of Program

The inspector reviewed the licensee's inservice inspection program submittal dated March 2, 1981 and discussed the submittal with site personnel. The two major areas of discussion were as follows:

a. The impact of the 77S78 edition of the ASME Code in the following areas:

(1) Coordination of Maintenance activities involving repair or replacement of ISI related items.

(2) Necessity for ensuring that seemingly harmless routine maintenance activities have not affected the baseline inspection data.

(3) Training and certification of personnel involved with inspections and operability verifications.

b. The effective date of the implementation and its impact on the inspection program.

The Code of Federal Regulations, 10 CFR 50.55a(g) and ASME B&PV Code, Section XI stipulate that the 120 month inspection intervals are keyed to the start of commerical operation of the facility. The ASME B&PV Code, Section XI requires that each 120 month interval be divided into thirds and that a specified part of the required inspection be completed during each 40 months. The statement by CP&L that both Brunswick Units will implement 77S78 edition of the ASME Code on July 1, 1981 for a new 120 month interval is in opposition to both the ASME Code and 10 CFR 50.55a(g).

The inspector reminded the licensee that Brunswick Unit 2 started commercial operation on November 3, 1975 and Brunswick Unit 1 started commercial operation on March 18, 1977, and that unless the units were out of service for 6 months or more (as defined by Section XI) the 120 month intervals would remain keyed to the commercial operation date.

There were no violations or deviations identified during this part of the inspection.

7. Inservice Inspection - Observation of Work

The inspector observed the activities of the licensee and his contractor, Southwest Research Institute (SwRI) during ultrasonic inspection of support welds and the evaluation of inspection report data.

During the observation of these activities the licensee's ISI coordinator informed the inspector that a part of the inspections required for this outage would not be conducted due to high radiation levels. The welds in question were some of the reactor pressure vessel to nozzle welds, which have thermal sleeve type of internal configuration. This type of configuration provides an area for crud build-up during operation with resulting high radiation levels. The licensee's ISI coordinator stated that the high levels could not be reduced because the head was not removed from the vessel during this outage so there was no available method for washing the area of the thermal sleeves and reducing the levels by dilution.

After determining that none of the nozzles contained any significant indications identified during baseline inspections, the inspector requested that the licensee present the problem in the form of a relief request to NRR. The licensee stated that the relief request would be formalized in the near future.

There were no violations or deviations identified during this inspection.

8. Inspector Follow-up Items

(Closed) Inspector Followup Item (50-325/80-23-04; 50-324/80-20-04) Maintenance Welder Training Program. The inspector reviewed the scope and details of the training program which is given to mechanics involved with maintenance welding operations. The training materials included Quality Assurance and Quality Control requirements as well as the technical requirements of the job.

There were no violations or deviations in this area of the inspection.

9. Inservice Inspection - Data Review

The inspector reviewed the following inservice inspection data and evaluation records:

a. Reactor Pressure Vessel to Flange Weld (from 0 to 258".)

b. Primary Steam Nozzle Welds at 72^{o}, 108^{o}, 252^{o} and 282^{o}.

c. Support Skirt Weld (from 453" to 530").

d. Control Rod Drive System - C12-CRD-3-Discharge

e. RHR System

E11-RHR-20-Suction
E11-RHR-24-A Discharge
E11-RHR-24-B Discharge

f. Recirculation System

Pump A	Studs and Nuts	1, 2, 3, 4, 5 and 6
Pump B	Studs and Nuts	1, 2, 3, 4 and 5
Pump A	Hangar Lug	B32-Pump A-1PHL

There were no violations or deviations in this area of the inspection.