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

Report Nos. 50-324/80-37 and 50-325/80-40

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

Facility Name: Brunswick Units 1 and 2

Docket Nos. 50-324 and 50-325

License Nos. DPR-62 and DPR-71

Inspection at Brunswick Units 1 and 2 near Southport, NC

Inspector: A. K. Gardner for J. E. Ouzts — 11/19/80 Date Signed

Accompanying Personnel: P. H. Skinner

Approved by: P. J. Kellogg, Section Chief, RONS Branch — 11/19/80 Date Signed

SUMMARY

Inspection on September 1-30, 1980

Areas Inspected

This routine, announced inspection involved 117 inspector-hours onsite in the areas of control room observations, review of plant logs, tours of vital areas, tours of physical security barriers, radiation protection, followup on IE Bulletins, followup on Unit 1 and 2 reactor trips, review of procedures, review of licensee event reports (LERs) and independent inspection effort.

Unit 1 Areas Inspected

This routine inspection by Resident Inspector involving 55 man-hours of inspection time onsite in the ten areas identified above.

Unit 1 Findings

Of the ten areas inspected no items of noncompliance or deviations were identified.

Unit 2 Areas Inspected

This routine inspection by the Resident Inspector involved 62 man-hours of inspection time onsite in the ten areas identified above.

Unit 2 Findings

Of the ten areas inspected no items of noncompliance were identified in nine areas; one item of noncompliance was identified in one area; Infraction - Failure of licensees' QA program, paragraph 6.

DETAILS

1. Persons Contacted

Licensee Employees

*A. C. Tollison, Plant General Manager
*J. M. Brown, Operations Manager
*G. T. Milligan, Maintenance Manager
*R. E. Morgan, Operations Manager
*J. A. Padgett, QA and Safety Director
*R. M. Poulk, Regulatory Specialist
*W. M. Tucker, Administrative and Technical Manager

Other licensee employees contacted included two technicians, twelve operators, six security force members and two office personnel.

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on September 5, 12 and 14, 1980 with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

None

4. Unresolved Item

None identified

5. Open Items

(Closed) Open Item 324, 325/79-38-01, The RWCU System Operating Procedure - OP-14 has been revised as follows. Closing of additional isolation valves when RWCU is removed from service; recoating of filter/demineralizer prior to return to service if the system has been pressurized greater than 30 minutes, and directing returning effluent to hotwell until chemistry is satisfactory. (This item is closed)

(Closed) Open Item 324, 325/79-SB-01, NRR Letter of January 1979 - discussion of deficiencies in procedures at BSEP. The procedures have been corrected.

(Closed Open Item 324, 325/79-38-02, Procedure EI-21 Main Steam Line High Radiation - The possibility of resin injection into reactor vessel has incorporated into EI-21. (This item is closed)

The licensee actions on the above open items were determined to be satisfactory. No items of noncompliance or deviations were identified.

6. Operational Safety Verification

The inspector observed control room operations, reviewed applicable logs and conducted discussions with control room operators during the month of September. The inspector verified the operability of selected emergency systems, reviewed tagout records and verified proper return to service of affected components. Tours of vital areas including the reactor buildings service water building and diesel building were conducted to observe plant equipment conditions, including potential fire hazards, fluid leaks, excessive vibrations and to verify that maintenance requests had been initiated for equipment in need of maintenance. The inspector, by observation and direct interview, verified that the physical security plan was being implemented in accordance with the station security plan.

The inspector observed plant housekeeping/cleanliness conditions and verified implementation of radiation protection controls.

No items of noncompliance or deviations were identified in these areas.

7. Licensee Event Reports Followup

Through direct observations, discussions with licensee personnel, and review of records, the following event reports were reviewed to determine that reportability requirements were fulfilled, immediate corrective action was accomplished, and corrective action to prevent recurrence had been accomplished in accordance with technical specifications.

Unit No. 1

LER No.	Title
1-80-012	RIP Valve X206 DC for torus level transmitter CAC-LT-2602 and X206 D-D shut and could not be opened.
1-80-024	Drywell Equipment Drain Integrator Indication Problem.
1-80-044	Failure of 1-CAC-AT-1263 RIP Valve X57-B to close.
1-80-058	Drywell Floor Drain Flow Integrator Problem.
1-80-063	APRM Setpoint Drift.
1-80-062	High Reactor Vessel Conductivity caused by organics in condensate.
1-80-066	Containment atmospheric monitor oxygen analyzer giving erronous indication.

1-80-069	Erratic flow indication on RHR 1-E11-FI-3338 meter on remote shutdown panel.
2-80-033	2A RHR Room Cooler Blower Breaker Tripping.
2-80-050	Setpoint Drift of Reactor Low Pressure Channel Switch 2-B21-PIS-N021B - Barton Model No. 288.
2-80-059	RHR Flow Transmitter Circuit Failure.
2-80-062	Shut Steam Exhaust Valves For RCIC and HPIC During Testing at 150 psig reactor pressure.

One item of noncompliance was identified as a result of the review and followup on LER 2-80-62. During the performance of RCIC testing at 150 psig reactor pressure the turbine exhaust manual check valve F001 was found locked closed. A check of the HPCI system revealed a similar valve, F021, in the turbine exhaust line to be closed but not locked. The Periodic Test results and valve lineup sheets showed that these valves had been verified open. The fact resulted in the conclusion that procedures for valve alignment and verification are inadequate.

8. IE Bulletin Followup

For the IE Bulletins listed below the inspector verified that the written response was within the time period stated in the bulletin. That the written response included the information required to be reported, that the written response included adequate corrective action commitments based on information presented in the bulletin and the licensee's response, that licensee management forwarded copies of the written response to the appropriate onsite management representatives, that information discussed in the licensee's written response was accurate, and that corrective action taken by the licensee was as described in the written response.

IEB No.	Title
IEB 79-04	Velan Check Valves (none installed or in spare stock at BSEP)
IEB 70-06A	Review of operational error and system misalignments identified during the Three Mile Island Incident (not applicable)
IEB 70-09	GE Type AK-2 Circuit Breakers (none installed in safety systems at BSEP)
IEB 79-12	Short period scrams at boiling water reactors.
IE 79-21	Temperature effects on level instruments (not applicable)

IEB 79-23	Potential failure of emergency diesel generator field exciter transformer (procedures has been written and tests performed - Ref. CP&L letter S/N GD-79-2627 of 10-29-80)
IEB-79-24	Frozen lines (heat traced) (CP&L has installed plant modifications #79-246 to increase capacity of power supply transformer)
IEB-79-25	Westinghouse Type BFD/NBFD relays (none installed in safety systems at BSEP)
IEB-79-28	NAMCO Model EA-180 limit switches. (none installed in safety systems at BSEP)

The action taken on these Bulletins has been determined to be adequate. No items of noncompliance or deviations were identified in the review of action taken by the licensee.

9. IE Circular Followup

For the IE Circular listed below, the inspector verified that the Circular was received by the licensee management, that a review for applicability was performed, and that if the circular were applicable to the facility appropriate corrective actions were taken or were schedule to be taken.

IEC No.	Title
IEC-79-19	Loose locking devices on Ingersol Rand Pump Impellers (Not applicable)

The licensee action on the above circular was determined to be adequate. No items of noncompliance or deviations were found.

10. Plant Procedure Review

The following procedures were reviewed for plant nuclear safety committee review and approval by the plant manager:

a. General Procedure - (GP-1)

b. Operating Procedures, OP-14; OP-16, OP-17, OP-19, OP-13, OP-32, OP-37.1, OP-46, OP-11 and OP-48.

c. Annunciator Procedures - A-4(#1), A-2(#1), A-1(#1), A-1(#2), A-25(#2), A-4(#2), VA-5(#2), VA-1(#1), and G16 P001-A1.

d. Emergency Instructions - EI-5.1, EI-30, EI-31 and EI-37.1.

e. Maintenance Procedures - MI 1-11, MI 1-12, MI 1-14, MI 1-16, MI 1-17, MI 1-21, MI 1-22, MI 1-31, MI 1-37D, MI 1-41, MI 1-42, MI 1-43, MI 1-44, MI 1-500A, MI 1-501, MI 1-502, MI 1-503 and MI 1-504.

f. Administrative Procedures - Vol. I Rev. 32, and SI-9 Rev. 20.

No items of noncompliance or deivations were identified.

11. Plant Trips

During the period of this report a followup on plant trips was conducted to determine the cause of the trip, to ensure that safety systems functioned properly and that the plant was placed in a safe shutdown conditions:

a. On September 24, 1980 Unit No. 2 reactor tripped on low water level during normal shutdown from 1% power. Following the trip the RCIC pump discharge valve failed to open and vessel level was maintained by manually starting HPCI.

b. On September 19, 1980 Unit No. 2 reactor tripped from 50% power due to automatic actuation of the reactor protection system. The cause of the automatic trip could not be associated with the tripping of any instrument channels. The cause of the spurious trip is under investigation by the licensee.

No items of noncompliance or deviations were identified.

12. Acceptance Criteria

The inspector used one more of the following sources of acceptance criteria for evaluating the above areas inspected.

a - 10 CFR 50, Appendix "B"
b - 10 CFR 20
c - Technical Specifications
d - ANSI N.45.2.3 (1971)
e - ANSI N.18.7 (1972)
f - Regulatory
f - Regulatory Guides
g - Site Security Plan
h - Quality Assurance Program