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

Report Nos. 50-324/82-36 and 50-325/82-33

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

Facility Name: Brunswick

Docket Nos. 50-324 and 50-325

License Nos. DPR-62 and DPR-71

Inspection at Brunswick site near Wilmington, North Carolina

Inspectors: G. K. Hardin — D. O. Myers — 10/1/82 Date Signed

G. K. Hardin — L. W. Garner — 10/1/82 Date Signed

Approved by: C. W. Burger — C. Burger, Section Chief, Division of Project and Resident Programs — 10/1/82 Date Signed

SUMMARY

Inspection on August 15 - September 15, 1982

Areas Inspected

This inspection involved 204 inspector hours on site in the areas of review of Licensee Event Reports, operational safety verification, review and audit of surveillance activities, review and audit of maintenance activities, followup of Confirmation of Action Letters, review and audit of onsite safety committee meetings, and independent inspection.

Results

Of the seven areas inspected, no violations were identified.

DETAILS

1. Persons Contacted

Licensee Employees

*A. Bishop, Technical and Administrative Manager
J. Boone, Engineering Supervisor
L. Boyer, Administrative Supervisor
G. Campbell, Mechanical Maintenance Supervisor (Unit 2)
R. Coburn, Director QA/QC
J. Cook, E&RC Foreman
R. Creech, I&C/Electrical Maintenance Supervisor (Unit 2)
*C. Dietz, General Manager, Brunswick
J. Dimmette, Mechanical Maintenance Supervisor
W. Dorman, QA Supervisor
E. Enzor, I&C Electrical Maintenance Supervisor
J. Harness, Plant Operations Manager
W. Hatcher, Security Specialist
J. Jefferson, I&C/Electrical Maintenance Supervisor (Unit 1)
W. Martin, Principle Engineer/Operations
G. Milligan, Principle Engineer/Onsite Nuclear Safety Section
D. Novotny, Regulatory Specialist
G. Oliver, E&RC Manager
*R. Poulk, Regulatory Specialist
C. Treubel, Mechanical Maintenance Supervisor (Unit 1)
L. Tripp, RC Supervisor
B. Tucker, Manager of Operations
V. Wagner, Director, Planning and Scheduling

Other licensee employees contacted included technicians, operators and engineering staff personnel.

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on September 15, 1982, with those persons indicated in paragraph 1 above. Meetings were also held with senior facility management periodically during the course of this inspection to discuss the inspection scope and findings.

3. Review of Licensee Event Reports

The below listed Licensee Event Reports (LER's) were reviewed to determine if the information provided met NRC reporting requirements. The determination included adequacy of event description and corrective action taken or planned, existence of potential generic problems and the relative safety significance of each event. Additional in-plant reviews and discussions

with plant personnel, as appropriate, were conducted for those reports indicated by an asterisk.

Unit 1

1-82-82 (3L)	Reactor coolant chloride concentration exceeded technical specifications.
1-82-90 (3L)	Control building chloride detection system calibration procedure had exceeded the 18 months plus 25% when it was performed.

Unit 2

2-81-77 (3L)	A control rod overtravel annunciator received during startup.
2-81-79 (3L)	High pressure coolant injection automatically isolated because of technical error.
2-81-94 (3L)	Condensate storage tank low level switch, 2-E41-LSL-N002, would not actuate.
2-81-112 (3L)	Primary containment atmospheric oxygen analyzer, 2-CAC-AT-1263-2, showed downscale indication of drywell oxygen concentration.
2-81-122 (3L)	"Core Spray or Pumps Running" annunciator received, due inadequate maintenance on "C" RHR pump discharge ADS initiation logic "A" permissive pressure switch, 2-E11-PS-N020C.
2-82-8 (3L)	RCIC system inoperable, due to absence of "Open" position indication for RCIC trip/throttle valve, 2-E51-MOV-V8.
2-82-34 (3L)	Reactor building exhaust ventilation radiation high instrument, 2-D12-RM-N010A, inadvertently actuated.
2-82-37 (3L)	Diesel generator no. 4 control air pressure below normal and declared inoperable.
2-82-72 (3L)	RHR pump 2C, motor breaker tripped resulting in LPCI and suppression pool cooling modes of "A" RHR subsystem declared inoperable.
2-82-86 (3L)	SRM's "C" and "D", both indicating an erratic upscale count rate.

2-82-89 (3L)	Post maintenance testing program for primary containment isolation valves, required by Technical Specifications, not established.
2-82-91 (3L)	Group 6 isolation valves, CAC-V4, V7 - 10, V15, V49, V50 and V58, logic train relays not being time response tested.
2-82-94 (3L)	SRM system channel surveillance frequency, outlined in test procedure, did not reflect required testing frequency.
2-82-97 (3L)	RWCU low level no. 2 isolation logic relay's armature travel time, for last relay in logic chain, not being timed for valves G31-F001 and G31-F004.
2-82-99 (1T)	The pneumatic supply to the RHR room cooler's air operated fan exhaust dampers, is not a safety grade air source.
2-82-102 (3L)	"A" loop core spray subsystem room cooler service water discharge valve 2-SW-V128, would not operate properly.

4. Operational Safety Verification

The inspector verified conformance with regulatory requirements throughout the reporting period by direct observations of activities, tours of facilities, discussions with personnel, reviewing of records and independent verification of safety system status. The following determinations were made:

- Technical Specifications. Through log review and direct observation during tours, the inspector verified compliance with selected Technical Specification Limiting Conditions for Operation.

- By observation during the inspection period, the inspector verified the control room manning requirements of 10 CFR 50.54(k) and the Technical Specifications were being met. In addition, the inspector observed shift turnovers to verify that continuity of system status was maintained. The inspector periodically questioned shift personnel relative to their awareness of plant conditions.

- Control room annunciators. Selected lit annunciators were discussed with control room operators to verify that the reasons for them were understood and corrective action, if required, was being taken.

- Monitoring instrumentation. The inspector verified that selected instruments were functional and demonstrated parameters within Technical Specification limits.

- Safeguard system maintenance and surveillance. The inspector verified by direct observation and review of records that selected maintenance

and surveillance activities on safeguard systems were conducted by qualified personnel with approved procedures, acceptance criteria were met and redundant components were available for service as required by Technical Specifications.

- Major components. The inspector verified through visual inspection of selected major components that no general condition exists which might prevent fulfillment of their functional requirements.

- Valve and breaker position. The inspector verified that selected valve and breakers were in the position or condition required by Technical Specifications for the applicable plant mode. This verification included control board indication and field observation (Safeguard Systems).

- Fluid leaks. No fluid leaks were observed which had not been identified by station personnel and for which corrective action had not been initiated, as necessary.

- Plant housekeeping conditions. Observations relative to plant housekeeping identified no unsatisfactory conditions.

- Radioactive releases. The inspector verified that selected liquid and gaseous releases were made in conformance with 10 CFR 20 Appendix B and Technical Specification requirements.

- Radiation controls. The inspector verified by observation that control point procedures and posting requirements were being followed. The inspector identified no failure to properly post radiation and high radiation areas.

- Security. During the course of these inspections, observations relative to protected and vital area security were made, including access controls, boundary integrity, search, escort, and badging.

No violation was identified.

5. Onsite Review Committees

The inspectors attended several special Plant Nuclear Safety Committee meetings conducted during the period of August 15 through September 15, 1982.

The inspectors verified the following items:

- Meetings were conducted in accordance with Technical Specification requirements regarding quorom membership, review process, frequency and personnel qualifications;

- Meeting minutes were reviewed to confirm that decisions/recommendations were reflected and follow-up of corrective actions were completed.

No violations were identified.

6. Surveillance Testing

The surveillance tests detailed below were analyzed and/or witnessed by the inspector to ascertain procedural and performance adequacy.

The completed test procedures examined were analyzed for embodiment of the necessary test prerequisites, preparations, instructions, acceptance criteria and sufficiency of technical content.

The selected tests witnessed were examined to ascertain that current, written approved procedures were available and in use, that test equipment in use was calibrated, that test prerequisites were met, system restoration was completed and test results were adequate.

The selected procedures perused attested conformance with applicable Technical Specifications, in that they have received the required administrative review and they were performed within the surveillance frequency prescribed.

PROCEDURE	TITLE
PT-02.2.4	Primary Containment Isolation Valve Verification
PT-04.1.1P	Reactor Building Vent Exhaust Monitoring System
PT-12.1.2	Diesel Generator Actual Load Test
PT-15.1	Standby Gas Treatment System Filter Test
PT-15.4	Secondary Containment Integrity
PT-20.6	Drywell to Torus Leak Rate Test

The inspector employed one or more of the following acceptance criteria for evaluating the above items: 10 CFR, ANSI N18.7, Technical Specifications.

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

7. Maintenance Observations

Maintenance activities were observed and reviewed throughout the inspection period to verify that activities were accomplished using approved procedures, that the activity was within the skill of the trade and that the work was done by qualified personnel. Where appropriate, limiting conditions for operation were examined to ensure that, while equipment was removed from service, the Technical Specification requirements were satisfied. Also, work activities, procedures, and work requests were reviewed to ensure adequate fire, cleanliness and radiation protection precautions were observed, and that equipment was tested and properly returned to service.

Acceptance criteria used for this review were as follows: Maintenance Procedures, Technical Specifications.

Maintenance activities observed or reviewed were:

Work Request #	Subject	Date completed
2-M-82-2843	2SW-128 Rework	8/20/82
2-M-82-2846	Pressure suppression system	8/18/82
2-M-82-2906	Replace 2E11-F029	8/16/82
2-M-82-513	Rebuild DW equipment drain pumps	5/10/82
2-E-82-548	Rework nuclear service water pump indication	5/22/82
2-E-82-1653	Rework drywell equipment drain components	6/3/82

Sixty outstanding work requests that were initiated by the operations group for Unit 1 were reviewed to determine that the licensee is giving priority to safety-related maintenance and not allowing a backlog of work items to permit a degradation of system performance.

During the course of the inspection, the following item was identified:

- While modifying and performing maintenance on containment atmospheric control (CAC) valves used for primary containment isolation, a problem was discovered on the travel stops of certain butterfly valves. In 1979, plant modifications 79-284 and 79-285 were initiated to install stops to limit the travel of CAC valves stems to approximately 45° to conform to the NRC interim position on containment purge valves. (Item II.E.4.2 of the NUREG 0737). The licensee found that 13 of the valves which were stroke modified subsequently had the travel stops removed. Licensee investigation indicates that the root cause of the problem was maintenance procedure MI 16-519. This procedure was not properly changed to reflect that travel stops on specific valves were not to be removed. MI 16-519 is a generic maintenance procedure used plant wide for 4" to 24" 150 psi posi-seal valves. The licensee has promptly submitted revision 003 to clarify MI 16-519 and initiated action to replace the required travel stops previously removed. The travel stops of the affected valves have been replaced.

  The inspectors have reviewed and discussed this issue with the licensee and consider the deficient procedure MI 16-519 as an isolated occurrence of inadequate implementation of ENP-3, Plant Modification Procedure. However, relative to this issue, the licensee considers that circumstances surrounding the apparent inadequate implementation of this TMI Action Item as well as previous inadequacies identified

regarding NUREG 0737, item I.C.6 (independent verification; see IE Report 50-324, 325/82-11); warrants initiation of a QA audit of the current status of all TMI related modifications. This audit is to be completed by 1-1-83. Review of the results of this audit will be considered an Inspector followup item (82-33-01).