



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

Report Nos.: 50-325/90-39 and 50-324/90-39

Licensee: Carolina Power and Light Company
 P. O. Box 1551
 Raleigh, NC 27602

Docket Nos.: 50-325 and 50-324

License Nos.: DPR-71 and DPR-62

Facility Name: Brunswick 1 and 2

Inspection Conducted: September 17-21, 1990

Inspectors: Charles Casto for 10/11/90
 R. Gibbs Date Signed
Charles Casto for 10/11/90
 B. Breslau Date Signed

Approved by: L. J. Watson 10/11/90
 L. J. Watson, Section Chief Date Signed
 Operational Programs Section
 Division of Reactor Safety

SUMMARY

Scope:

This routine, announced inspection was conducted in the areas of follow-up for the Diagnostic Evaluation Team (DET) findings.

Results:

In the areas inspected, no violations or deviations were identified. The licensee's progress in accomplishing the Integrated Action Plan (IAP) related to the NRC DET Inspection was satisfactory. The items listed in this report were closed, where appropriate, by the inspectors. For items which were not closed, the reason for non-closure is specified under each item. Note: Each item references the NRC tracking number assigned in Inspection Report 50-325,324/89-34, the Section 2 paragraph of the DET report, and the licensee's IAP item number, where appropriate.

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REPORT DETAILS

1. Persons Contacted

Licensee Employees

- * K. Altman, Manager, Regulatory Compliance
- * S. Callis, On-Site Representative, Licensing
- * W. Dorman, Manager, QA/QC
- * J. Hagewood, Manager, Plant Services
- * J. Harness, Plant General Manager
- * H. Harrelson, Maintenance, Specialist
- * R. Helme, Manager, Technical Support
- * J. Henderson, Manager, Radiation Control
- * M. Jones, Manager, Onsite Nuclear Safety
- * T. Jones, Sr. Specialist, Regulatory Compliance
- * B. Leonard, Manager, Training
- * D. Moore, Projects Manager, Outage Management and Modifications
- * J. Moyer, Technical Assistant to Plant General Manager
- * P. Musser, Manager, Maintenance Staff
- * C. Robertson, Manager, Environmental and Chemistry
- * W. Simpson, Manager, Control and Administration
- * R. Starkey, Site Vice President
- * R. Tart, Manager, Operations Unit 2
- * K. Williamson, Manager, Engineering (NED)

Other licensee employees contacted during this inspection included engineers and administrative personnel.

NRC Resident Inspectors

- * R. Prevatte, Senior Resident Inspector
- B. Levis, Resident Inspector
- D. Nelson, Resident Inspector
- * Attended exit interview

Acronyms used throughout this report are listed in paragraph 4.

2. Action on Previous Inspection Findings (92701)

The following items from the NRC Diagnostic Evaluation Team inspection were reviewed for closure during this inspection. All of the items listed below, with the exception of 50-325,324/90-19-04, were previously reviewed in Inspection Report 50-325,324/90-21.

- a. (Closed) Inspector Follow-up Item 50-325,324/89-34-14, Follow-up on implementation and effectiveness of nuclear training improvements (Reference DET paragraph 2.1.2.12 and IAP item B3).

This item noted that the overall training program was of high quality and effectively implemented; it also noted that an excessive instructor work load and a pay freeze had resulted in low instructor morale.

The licensee's response to this issue indicated that the Nuclear Training Section's organization and staffing would be thoroughly reviewed during the Organizational Analysis (OA) process. Specific actions were identified by the OA and subsequently itemized in the licensee's IAP as item B3. These improvements were:

- 1) Review activities performed at the Environmental Energy (E&E) Center and Plants, to identify work needing more emphasis and tasks that are not being performed in a cost effective manner.
- 2) Where appropriate, reallocate training responsibilities and personnel among nuclear program training units.
- 3) Redirect organizational focus of resources remaining at the E&E Center.
- 4) Implement procedures and practices to improve instructor utilization.
- 5) Transfer Real-Time Training from all plant organizations to the Brunswick Training Unit (BTU).
- 6) Address BTU use of contractors.
- 7) Clarify training mission, roles, and responsibilities between BTU and the E&E Center.
- 8) Resolve conflicting objectives between BTU and Brunswick Plant and industry regulators.

The inspectors determined from a review of the licensee's assessment that organizational changes have been implemented for only a short time and are experiencing continuing refinements. Effectiveness of the changes at this early stage is not measurable, however, the licensee's actions appear to adequately address the concerns noted by the DET. This item is closed.

- b. (Open) Inspector Follow-up Item 50-325,324/89-34-17, Follow-up on implementation and effectiveness of Technical Specifications (TS) data base accuracy sample (Reference DET paragraph 2.1.4.1 and IAP item D1.a).

This item concerned a weakness noted by the DET in the implementation of the surveillance tracking and scheduling system (STSS) regarding the accuracy of the STSS data base. The team concluded that this system was an effective means of scheduling and tracking technical specification surveillances, but that this system was not periodically verified to ensure that all TS surveillance requirements were tracked by the STSS.

As a result, the licensee committed to establish a sampling program to test the data base integrity. A plan was established as an enclosure to an implementation guide for STSS data base verification. This plan will involve the performance of a 100 percent line-by-line verification that the TS surveillance requirements listed in the Unit 2 TSs are included in the STSS data base. Subsequent to this verification, a report detailing the results of the review and providing recommendations concerning a similar review for Unit 1 and/or an ongoing long-term program will be prepared. The completion date for this report is scheduled to be March 1, 1991. Although this action does not establish a definite ongoing periodic review, it would establish a baseline. Procedural controls currently exist to ensure that additional TS test changes and procedure changes are incorporated into the STSS.

This inspection determined that the review of the Unit 2 TSs against the STSS is approximately thirty percent complete. The review to date has not found any significant deficiencies, such as surveillances missing from the data base, which would result in inoperable equipment. This item remains open pending completion of the Unit 2 review and recommendations which result from that review.

- c. (Open) Inspector Follow-up Item 50-325,324/89-34-26, Follow-up on results of licensee's review of recently issued procedures to ensure intent of Procedures Administration Manual (PAM)(Reference DET paragraph 2.1.4.4 and IAP item D13).

As part of the Brunswick Improvement Plan (BIP) in 1982, a commitment was made to the NRC to establish a nuclear procedure governing the standardization and preparation of plant procedures. This was completed in June 1983, with the issuance of the PAM. During the spring of 1989, the DET determined that the PAM was not being implemented effectively. The team noted that there was inconsistency between the PAM and the Plant Operating Manual Administrative Procedure (POMAP). Additionally, an inconsistency between the POMAP and the Maintenance Unit Procedure (MUP) was noted in that the POMAP did not require a safety evaluation for a temporary revision and the MUP did.

As a result of the findings, the licensee committed to conduct a review of recently issued procedures to determine if the procedures met the intent of the PAM and to initiate corrective actions, as necessary. The licensee's review concluded that, in general, progress has been made in bringing procedures into consistency with the PAM, particularly procedures issued since July 1, 1989. However, some inconsistencies were the result of inattention to PAM formatting criteria.

In order to correct the deficiencies noted by the DET and the licensee's own review of this area the licensee initiated several corrective actions which are outlined in Inspection Report 50-325,324/90-21. All of those corrective actions have been completed, as verified by this inspection, with the exception of the item concerning revision to the PAM to make it a more useable document. This item is a significant effort involving input from all three CP&L sites and is scheduled for completion by December 31, 1990. This item is being held open to verify completion of that action and to evaluate the effectiveness of all corrective actions for this item.

- d. (Closed) Inspector Follow-up Item 50-325,324/89-34-30, Follow-up on implementation and effectiveness of the new tagging and labeling program (Reference DET paragraph 2.1.4.8 and IAP item D22).

The DET concluded that the plant labeling program at Brunswick was ineffective. This conclusion was based on the fact that there were a number of labeling deficiencies in the plant, the plant labeling group was understaffed, and a comprehensive program to identify, evaluate, prioritize, and correct deficiencies was not in place. In order to correct this deficiency the licensee committed to develop and implement a comprehensive plant labeling/tagging program. This program was to include centralization of tagging and labeling efforts, development of a "stand alone" tagging/labeling procedure, and development of an action plan to retag or relabel plant components. These actions were to be completed by February 28, 1990.

Review of this area in May 1990 (documented in Inspection Report 50-325,324/90-21) determined that all licensee commitments had been met. Since then a detailed five year labeling plan has been issued, additional staffing has been added to the labeling group, and labeling of plant components has continued. The overall conclusion concerning this item is that Brunswick has developed and implemented an excellent labeling program. Labeling of components in the service water building and the diesel generator building was particularly noteworthy. This item is closed.

- e. (Open) Inspector Follow-up Item 50-325,324/89-34-32, Follow-up on adequacy of Emergency Operating Procedure (EOP) revisions and validation/verification (V&V)(Reference DET paragraph 2.1.2.8 and IAP item D28).

This item noted that the EOPs were not consistent with the Boiling Water Reactor (BWR) Owners Group Emergency Guidelines (OGEG). The procedure format prioritized operator actions according to a predetermined significance and incorporated specific response strategies such as post-scrum recovery and implementation of accident mitigation actions during execution of the EOPs on the simulator.

The licensee's previous response to this issue included action which encompassed revisions to EOPs to simplify the procedures and match the BWR OGEG by preparing a Plant Specific Technical Guideline (PSTG), writer's guide, writing procedures, and performing V&V with subsequent incorporation of changes identified during the V&V process. Following this process, the licensee would conduct training and/or follow-up training if required. The training process would be utilized to identify needed changes, as well as, enhancing operator EOP familiarity. Additionally, the licensee's response included an agreement to improve the on-going evaluation program to ensure the up-dated EOPs remain an effective tool for the operators.

The EOPs have received preliminary V&V and incorporation of changes with final V&V scheduled for completion by October 15, 1990. The inspectors found the V&V process to be thorough and comprehensive. The updated procedures were being exercised by each shift, receiving adequate critiques with subsequent procedure changes being incorporated. This item will remain open; follow-up of the effectiveness of these changes will be assessed during a future inspection.

- f. (Open) Inspector Follow-up Item 50-325,324/90-19-04, Review and follow-up on implementation and effectiveness of long-term corrective action for operator training in IAP items D32 and D33.

The licensee has targeted an accomplishment date of January 15, 1991, for the necessary actions to improve licensed operator training. The inspector's review of the licensee's corrective actions found adequate progress being made toward meeting full implementation of improvements in the operator training program.

3. Exit Interview

The inspection scope and results were summarized on September 21, 1990, with those persons indicated in paragraph 1. The inspectors described the areas inspected and discussed in detail the inspection results listed below. Proprietary information is not contained in this report. Dissenting comments were not received from the licensee.

<u>Item #</u>	<u>Status</u>	<u>Description</u>
325,324/89-34-14	Closed	IFI, Implementation and effectiveness of nuclear training improvements (paragraph 2.a)
325,324/89-34-17	Open	IFI, Implementation and effectiveness of TS data base accuracy sample (paragraph 2.b)
325,324/89-34-26	Open	IFI, Results of licensee's review of recently issued procedures to ensure intent of PAM (paragraph 2.c)

325,324/89-34-30	Closed	IFI, Implementation and effectiveness of new tagging and labeling program (paragraph 2.d)
325,324/89-34-32	Open	IFI, Adequacy of EOP revisions and validation/verification (paragraph 2.e)
325,324/90-19-04	Open	IFI, Implementation and effectiveness of long-term corrective action for operator training (paragraph 2.f)

4. Acronyms and Abbreviations

BIP	Brunswick Improvement Program
BWR	Boiling Water Reactor
DET	Diagnostic Evaluation Team
EOP	Emergency Operating Procedure
IAP	Integrated Action Plan
IFI	Inspector Follow-up Item
MUP	Maintenance Unit Procedure
NED	Nuclear Engineering Division
NRC	Nuclear Regulatory Commission
OA	Organizational Analysis
OGEG	Owners Group Emergency Guidelines
PAM	Procedures Administrative Manual
POMAP	Plant Operating Manual Administrative Procedure
PSTG	Plant Specific Technical Guidelines
QA/QC	Quality Assurance/Quality Control
STSS	Surveillance Tracking and Scheduling System
TS	Technical Specification