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

Report Nos.: 50-325/86-04 and 50-324/86-05

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: January 27-31, 1986

Inspector: C. Smith 3/6/86
C. Smith Date Signed

Approved by: G. Belisle 3/7/86
G. Belisle, Acting Section Chief Date Signed
Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection involved 24 inspector-hours at the Corporate Office in the areas of QA Program Review and Audits.

Results: No violations or deviations were identified.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*R. Baldwin, Senior QA Specialist - Performance Evaluation Unit
*R. Barnham, Project QA Engineer - QA Engineering Unit
A. Hall, Senior QA Specialist - Performance Evaluation Unit
*I. Johnson, Project QA Specialist - Performance Evaluation Unit
*H. Love, Jr., Principal QA Specialist - Training and Adminsitration
*R. Lumsden, Manager, QA Service Section
C. Moseley, Jr., Manager, Operations QA/QC
*W. Poteat, Principal Vendor Surveillance Specialist
*G. Roisler, Senior QA Specialist
C. Rosenberger, Principal QA Specialist - Performance Evaluation Unit
*R. Watson, Acting Project QA Engineer, QA Engineering Unit

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on January 31, 1986, with those persons indicated in paragraph 1 above. The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection.

3. Licensee Action on Previous Enforcement Matters

This subject was not addressed in the inspection.

4. Unresolved Items

Unresolved items were not identified during the inspection.

5. QA Program Review (35701)

Reference: (a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants

(b) 10 CFR 50.54(a)(1), Conditions of Licenses

The inspector reviewed the licensee QA program required by references (a) and (b) to determine if QA program activities were conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specifications (TS). The following criteria were used during this review:

- Personnel responsible for preparing implementing procedures understand the significance of changes to these procedures.

- Licensee procedures are in conformance with the QA program.

The documents listed below were reviewed to determine if these criteria had been incorporated into QA program requirements:

BSEP 1 and 2 Updated FSAR,
Section 17.2.2, Quality Assurance Program
Section 17.2.15, Nonconforming Materials, Parts, or Components
Section 17.2.16, Corrective Action
Section 17.2.18, Audits

Corporate Quality Assurance Program Manual,
Section 1, Introduction
Section 2, Organization and Responsibilities
Section 15, Nonconformance Control and Corrective Action
Section 16, Audits

CQAD 10-3 Matrix for Determining Audit Requirements, Revision 1

CQAD 20-2 Procedure for Training and Qualification of QA Program Audit Personnel, Revision 4

CQAD 70-3 Nonconformance and Corrective Action, Revision 4

CQAD 70-4 Corporate QA Nonconformance Trending Reports, Revision 0

CQAD 80-1 Procedure for Corporate Audits, Revision 10

TS Section 6.5.5, Corporate QA Audit Program

The inspector reviewed the QA program implementation in Audits and verified that licensee commitments delineated in the Brunswick Improvement Program (BIP), Items No. III-1 through III-4 have been met by the licensee.

The inspector determined that the licensee Corporate QA Program Manual, Section 15, combined the program requirements for 10 CFR 50, Appendix B, Criteria XV and XVI. Licensee management was interviewed regarding this and information was requested concerning the auditing of these two QA program elements as required by the TS. The inspector was informed that the corrective action for nonconformances identified by audits are reviewed to verify completion of the corrective action and to close the nonconformance via of the audit process. However, Criterion XVI, corrective action is not audited as a separate element of the QA program to determine the adequacy and effectiveness of the corrective action. In further discussions with licensee management, the inspector was informed that this topic was

previously identified during a "Management Review of QA Audit Activities" performed by licensee consultants. The following documents were reviewed by the inspector in connection with licensee actions taken to correct this identified program weakness:

CP&L Memorandum from O. L. Hinton to C. A. Rosenberger, Subject: Establish a Process for Incorporating Verification of C/A in Checklists, dated April 9, 1985.

CP&L Memorandum from R. L. Mayton, Jr., to H. R. Banks, Subject: Consultant Report Regarding Management Review MR-14, dated December 20, 1984.

The status of outstanding items contained in the BIP were reviewed by the inspector and discussed with licensee management. The following letters were reviewed by the inspector in connection with this effort:

CP&L letter Serial: NLS-85-194 from S. R. Zimmerman, Manager Nuclear Licensing Section, to Doctor J. Nelson Grace, Regional Administrator, dated July 1, 1985.

CP&L letter Serial: NLS-85-453 from A. B. Cutter, Vice President Nuclear Engineering and Licensing, to Doctor J. Nelson Grace, Regional Administrator, dated January 8, 1986.

Within this area, no violations or deviations were identified.

6. Audits (40702)

References:
(a) 10 CFR 50, Appendix B, Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants

(b) 10 CFR 50.54(a)(1), Conditions of License

(c) Regulatory Guide 1.144, Auditing of Quality Assurance Programs for Nuclear Power Plants, January 1979

(d) ANSI N45.2.12 - 1977, Requirements for Auditing of Quality Assurance Programs for Nuclear Power Plants

(e) Regulatory Guide 1.146, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants, Revision 0

(f) ANSI N45.2.23 - 1978, Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants

(g) Regulatory Guide 1.33, Quality Assurance Program Requirements (Operation), November 1972

(h) ANSI N18.7 - 1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

(i) Technical Specifications, Section 6.5

The inspector reviewed the licensee audit program required by References (a) through (i) to determine if auditing activities were conducted in accordance with regulatory requirements, industry guides and standards, and Technical Specification (TS). The following criteria were used during this review:

- The scope of the audit program has been defined and is consistent with TS and QA program requirements.
- Responsibilities have been assigned in writing for overall management of the audit program.
- Methods have been defined for taking corrective action when deficiencies are identified during audits.
- The audited organization is required to respond in writing to audit findings.
- Distribution requirements for audit reports and corrective action responses have been defined.
- Checklists are required to be used in the performance of audits.
- QA audit personnel meet minimum education, experience, and qualification requirements of the audited activity.

The documents listed below were reviewed to determine if these criteria had been incorporated into auditing activities:

BSEP 1 and 2, Updated FSAR

Section 17.2.2, Quality Assurance Program
Section 17.2.15, Nonconforming Materials, Parts, or Components
Section 17.2.16, Corrective Action
Section 17.2.18, Audits

Corporate Quality Assurance Program Manual
Section 1, Introduction
Section 2, Organization and Responsibilities
Section 15, Nonconformance Control and Corrective Action
Section 16, Audits

CQAD 10-3 Matrix for Determining Audit Requirements, Revision 1

CQAD 20-2 Procedures for Training and Qualification of QA Program Audit Personnel, Revision 4

CQAD 70-3	Nonconformance and Corrective Action, Revision 4
CQAD 70-4	Corporate QA Nonconformance Trending Reports, Revision 0
CQAD 80-1	Procedure for Corporate Audits, Revision 10
QAP-301	Surveillance Program, Revision 16
QAP-302	Technical Specification Surveillance Program, Revision 8
QAP-303	Regulation Surveillance, Revision 6
QAP-305	Inservice Inspection Surveillance Program, Revision 3

The inspector reviewed the licensee Audit Planning/Scheduling Matrix Plant Operations for 1985 and 1986 to determine audit program scope and to verify conformance with the TS and QA program requirements. Pursuant to this review, the inspector determined that the following activities delineated in the TS are not audited as separate elements of the QA program.

TS Section 6.5.5.2.j, Process control program and implementing procedures for processing and packaging of radioactive wastes at least once per 24 months

TS Section 6.5.5.2.k, Performance of activities required by the QA program to meet the provisions of Regulatory Guide 1.21, Revision 1, June 1974, and Regulatory Guide 4.1, Revision 1, April 1975, at least once per 12 months

Additionally, various criteria of 10 CFR 50, Appendix B required to be audited by TS, Section 6.5.5.2.d, are not audited as separate QA program elements. The following are examples of the criteria not audited:

Criteria IX, Control of Special Processes
Criteria XI, Test Control
Criteria XV, Nonconforming Materials, Parts, or Components
Criteria XVI, Corrective Action

The inspector discussed the conduct of audits with licensee management and determined that activities required to be audited by TS Sections 6.5.5.2.j and 6.5.5.2.k are conducted during audit of the following audit elements delineated in the audit scheduling matrix:

Environmental Surveillance and Protection Conditions

Radiation and Respiratory Protection

Licensee management further stated that all applicable criteria of 10 CFR 50, Appendix B are reviewed during audits performed in various functional areas in accordance with the audit scheduling matrix. Based on

the review of program documents and discussions with licensee management, the planning/scheduling and scope of audits appears to be adequate.

The Brunswick Nuclear Project Improvement Program imposed the following commitments on the licensee:

Action Item III-1

Expand surveillance of Inservice Inspection (ISI), Appendix J, TS and Regulatory Requirements to enhance comprehensiveness and increase frequencies.

Action Item III-2

Establish program for QA to monitor plants implementation of TS revision and regulatory requirements.

Action Item III-3

Require QA to perform 100 percent review of TS requirements every three years.

Action Item III-4

Establish program for periodic review of Items III-1 through III-3 by Corporate Auditing.

Action Item III-5, Part 1

Modify Corporate QA program to include an escalation mechanism.

Action Item III-5, Part 2

Modify Corporate QA program to include three levels of nonconformance.

The inspector reviewed licensee actions taken in response to the above commitments and verified that the commitments had been met and were being maintained. The following documents were reviewed in correction with this effort:

CP&L memorandum from C. A. Rosenberger to R. E. Lumsden, Subject: Brunswick Nuclear Project Improvement Program dated September 18, 1984.

Audit Report No.: QAA/X126-85-01
Date of Audit: March 11-15, 1985
Activity Audited: QA/QC-BSEP

Audit Report No.: QAA/XX21-85-04
Date of Audit: June 3-7, 1985
Activity Audited: Brunswick Steam Electric Plant Operations (Inservice Inspection, Maintenance, and TS/License Changes)

Audit Report No.: QAA/21-25
Date of Audit: November 29 - December 3, 1982
Activity Audited: Brunswick Steam Electric Plant Operations Units 1 and 2

The inspector reviewed the following documents in connection with management reviews of QA Audit Activities:

CP&L memorandum from R. L. Mayton, Jr., to H. R. Banks, Subject: Consultant Report Regarding Management Review MR-14, dated December 20, 1984.

CP&L memorandum from R. L. Mayton, Jr., to Sherwood H. Smith, Jr., and E. E. Utley, Subject: Management Review of Quality Assurance Audit Activities (MR-15), dated June 20, 1985.

CP&L memorandum from R. L. Mayton, Jr., to Sherwood H. Smith Jr., and E. E. Utley, Subject: Management Review of Quality Assurance Audit Activities (MR-16), dated December 19, 1985.

Nonconformances identified during the above management reviews were adequately addressed and appropriate corrective actions initiated for their disposition.

Nonconformances identified by implementation of CQAD procedure 70-3 are trended to provide a mechanism for management to identify potential adverse trends and to provide sufficient details to determine proper corrective actions to reduce or eliminate the adverse trends. The inspector reviewed the Brunswick Nuclear Project Audit Deficiency Reports (ADRs) and Nonconformance Reports (NCRs) issued from January 1, 1985 to March 31, 1985. Discussions were held with licensee management concerning the results of the report which indicated that the major cause for the ADRs and NCRs was failure to follow procedure. The inspector was informed that licensee management has determined the root cause for the nonconformances to be inadequate training of personnel. Corrective action in the form of additional training has been provided to licensee personnel. Additional reviews of the Second Quarter (April 1 - June 30, 1985), Third Quarter (July 1 - September 30, 1985), and Fourth Quarter (October 1 - December 31, 1985), nonconformance trending reports were performed by the inspector. Based on the review of the above documents and discussion with licensee management, the nonconformance trending program appears to be effective in identifying adverse trends in the QA program and directing appropriate corrective actions to eliminate the adverse trends.

The inspector reviewed the qualifications of four auditors and discussed the training program with licensee management. The inspector determined that licensee management has enhanced the training program for auditing personnel. A Corporate ALARA program has been developed and implemented for Corporate QA Program staff members. Additional training using outside consultants has also been provided in the area of systems engineering. Frequent use of consultants with specialized expertise was also employed during the conduct of audits.

Within this area, no violations or deviations were identified.