



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

Report Nos. 50-325/82-26 and 50-324/82-26

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

Facility Name: Brunswick 1 and 2

Docket Nos. 50-325 and 50-324

License Nos. DPR-71 and DPR-62

Inspection at Brunswick site near Southport, North Carolina

Inspectors: For R.W. Wright 8/10/82
 P. H. Skinner Date Signed

For R.W. Wright 8/10/82
 L. H. Jackson Date Signed

Approved by: for C.M. Upright 8/10/82
 C. M. Upright, Section Chief Date Signed
 Engineering Inspection Branch
 Division of Engineering and Technical Programs

SUMMARY

Inspection on July 12-16, 1982

Areas Inspected

This routine, unannounced inspection involved 60 inspector-hours on site in the areas of licensee action on previous enforcement matters, training, requalification training, maintenance, organization and administration, calibration, and surveillance.

Results

Of the seven areas inspected, no violations or deviations were identified in six areas; one violation was found in one area (Failure to provide measures to preclude bypassing required testing, paragraph 7).

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- L. Boyer, Administrative Assistant to the General Manager
- *F. Coburn, Plant QA/QC Director
- *C. Dietz, Plant General Manager
- *W. Dorman, QA Supervisor
- K. Enzor, I&C/Electrical Maintenance Supervisor
- W. Link, Shift Foreman
- W. Martin, Operations Supervisor
- *R. Morgan, Manager, Plant Operations
- *R. Poulk, Jr., Regulatory Specialist
- C. Robertson, Environmental and Chemistry Supervisor
- E. Saburn, Training Assistant
- M. Shealy, Training Specialist
- *S. Thorndyke, Training Supervisor
- L. Tripp, Environmental and Radiation Control Supervisor
- R. White, QA/QC Specialist Surveillance

Other licensee employees contacted included technicians, operators, and office personnel.

NRC Resident Inspector

- *D. Myers, Senior Resident Inspector

*Attended exit interview

2. Exit Interview

The inspection scope and findings were summarized on July 16, 1982, with those persons indicated in paragraph 1 above. The licensee acknowledged the following inspection findings:

Violation, 325, 324/82-26-01, Failure to Provide Measures to Preclude Bypassing Required Testing, paragraph 7.

Inspector Followup Item 325, 324/82-26-02, Response to QA/QC Audit of Training Program, paragraph 5.

Inspector Followup Item 325, 324/82-26-03, Revision to TI-200, Brunswick Plant Operator Retraining Program, paragraph 6.

3. Licensee Action on Previous Enforcement Matters

(Closed) Unresolved Item, 325, 324/81-19-07, Failure to Follow NRC Criteria for Annual Requalification Examination. The licensee had been presented a copy of the NRC position relative to Reactor Operator and Senior Reactor Operator written examination criteria (see Inspection Report 50-325, 324/82-16) and committed to a tentative date of July 15, 1982, to incorporate this position into existing procedures. A review of TI-200, Brunswick Plant Operator Retraining Program, Revision 6, indicates that these requirements have been included in this procedure.

4. Unresolved Items

Unresolved items were not identified during this inspection.

5. Training (41700)

- References:
- (a) Technical Specifications, Section 6
 - (b) ANSI N18.1-1971, Selection and Training of Nuclear Power Plant Personnel
 - (c) Regulatory Guide 8.13, Prenatal Radiation Exposure
 - (d) Regulatory Guide 1.8, Personnel Selection and Training
 - (e) TI-101, Related Technical Training and On-the-job Training for I&C Technicians, Revision 3
 - (f) TI-102, Related Technical Training and On-the-job Training For Mechanics, Revision 3
 - (g) TI-103, Related Technical Training and On-the-job Training for Radiation Control and Test Technicians, Revision 4
 - (h) TI-600, Engineering Subunit Training, Revision 0
 - (i) QAP-103, Personnel Indoctrination, Training, and Qualification, Revision 3

The inspector reviewed the training program which provides the required training for the facility staff personnel. This program was reviewed to verify that it complies with requirements contained in references (a) through (d) above; the program covers training in the areas of administrative controls and procedures, radiological health and safety, industrial safety, security procedures, emergency plan, quality assurance training, and prenatal radiation exposure training for females; nonlicensed operators are trained in functions which they perform; and related technical and on-the-job training is provided to applicable personnel where required. The plant specialty group training programs, references (e) through (i), were reviewed to determine if formal technical training commensurate with the job classification was being provided. The inspector reviewed approximately 40 training records of plant personnel and 32 training records of various vendor and consultant personnel.

Within this area, one inspector followup item was identified. The inspector identified various areas in the training program which were not being performed and areas where the licensee's program did not meet regulatory requirements. A QA/QC surveillance (NCR-S-81-006) had been performed September 17, 1981, which identified the following deficient areas in the training program:

- a. Training records do not reflect evidence of adequate indoctrination and training of new employees and contract employees in that they do not include specifics in training oriented toward job related activities such as applicable QA procedures, job related instructions or job related procedures, etc.
- b. Training records do not reflect evidence of a retraining or a replacement training program which meets or exceeds the requirements and recommendations of Section 5.5 of ANSI N18.1-1971.
- c. Records could not be found that document training in plans and procedures for all regularly employed persons. Some records revealed little or no training.
- d. Records could not be found which document full compliance to the requirements of ANSI N18.7, Section 3.3, Indoctrination and Training.
- e. QA Records do not show evidence that personnel responsible for performing quality-affecting activities are instructed as to the purpose, scope, and implementation of the quality-related manuals, instructions, and procedures.
- f. It was noted that training sessions were being held by Maintenance but did not contain specific training in BSEP instructions and procedures. Also, attendance was on an as available basis which did not include everyone involved.
- g. The qualification card process of training personnel is inadequate in that it does not include requirements for training in QA procedures, instructions, plant modifications, or procedures as required by ANSI N18.1 or ANSI N18.7.

Audit QAA/21-18/19 dated November 18, 1981, also identified these areas and stated credit would be given to operations QA/QC for the above nonconformances and that the response to these nonconformances will be reviewed by the Performance Evaluation Unit and concurrence given prior to closeout. Correction of the nonconformances identified in this audit regarding the training program (NCR-S-81-006) is scheduled for September 17, 1982. This corrective action will be tracked as an inspector followup item (325,324/82-26-02).

6. Requalification Training (41701)

- References:
- (a) Technical Specifications, Section 6.4, Training
 - (b) 10 CFR 55 Appendix A, Operator Requalification
 - (c) ANSI N18.1 1971, Selection and Training of Nuclear Power Plant Personnel
 - (d) TI-200, Brunswick Plant Operator Retraining Program, Revision 6

The inspector reviewed the requalification program to determine conformance to references (a) through (d). The inspector reviewed the following areas: retraining conducted in 1981 and to date in 1982; annual written examinations and the individual's responses; documentation of required control manipulations; schedule for conducting lectures and prepared lesson plans; and participation in accelerated training program when applicable. The training records of eight licensed operators were reviewed.

Within this area, one inspector followup item was identified. 10 CFR 55.31(e) requires that if a licensee has not been actively performing the functions of an operator or senior operator for a period of four months or longer, he shall, prior to resuming licensed activities, demonstrate to the Commission that his knowledge of facility operation and administration is satisfactory. Reference (d), Appendix A under Phase II - Operator Evaluation, the fourth paragraph requires that any licensed operator absent from the site for a period of four months or longer will require an accelerated training program and notification to NRC prior to returning him to his normal duties. No examples were identified where any licensed operator had exceeded this four month period and had performed licensed operator functions. The licensee committed to a date of September 15, 1982, to revise reference (d) to meet the requirements of 10 CFR 55.31(e). This will be tracked as an inspector followup item (325, 324/82-26-03).

7. Maintenance (62700)

- References:
- (a) CP&L Accepted Quality Assurance Program (Letter, E. E. Utley to D. G. Eisenhut, March 18, 1981)
 - (b) Corporate Quality Assurance Program, Section 13, Maintenance Control, Revision 12
 - (c) MP-14, Corrective Maintenance, Revision 12

The inspector reviewed the licensee's maintenance program described in references (a) through (c). The inspector selected eight work request and authorization forms (1-E-82-938, 1-E-82-940, 1-E-82-392, 2-M-82-1929, 2-M-82-1930, 2-M-82-1734, 2-E-82-1966, and 1-N-82-201) for this review. The work requests were reviewed to verify that valves are being tested, stroke times are being met, procedures are being complied with, and acceptance criteria are being met. Each work request involved primary containment isolation valves that had been repaired between December 1981 and May 1982.

Within this area, one violation was identified. Corrective maintenance procedure MP-14, requires the shift foreman to indicate on the work request the appropriate operations work procedure (OWP) to be performed after completion of work if testing is required. In the examples listed above, the shift foreman had not specified any required testing on the work request. Performance of cycling tests, and verification of isolation time is required by Technical Specification 4.6.3.1 to demonstrate operability prior to returning the valve to service after maintenance, repair, or replacement work is performed on the valve or its associated actuator, control, or power circuit. MP-14, states in Section XI that final acceptance of the work is made by the Shift Foreman when operability of the system has been demonstrated.

In the eight examples listed above, the Shift Foreman had signed and dated the work request accepting the work as complete. In four of the eight examples listed operability testing had not been performed prior to returning the valves to service.

Discussions with operations personnel indicated that it is common practice to postpone operability testing during extended outages until immediately prior to returning the plant to operation. Since it is common practice to delay testing until immediately prior to startup, it appears that Shift Foremen are not indicating required testing on the work request. A review of the licensee's startup procedure was performed and various tests were identified which must be performed prior to or during startup. However, none of the testing which was required as a result of maintenance was identified or tracked in the startup. The licensee provided no justification for omitting required operability tests to work requests completed during routine plant operations.

Existing procedures do not address bypassing required testing to a later date when plant conditions do not permit appropriate testing at the time maintenance work is completed. Failure to establish measures required by the accepted QA program and ANSI N18.7 constitutes a violation (325, 324/82-26-01).

8. Organization and Administration (36700)

- Reference:
- (a) Technical Specifications, Section 6.3, Facility Staff Qualifications
 - (b) ANSI N18.1-1971, Selection and Training of Nuclear Power Plant Personnel

The inspector reviewed the qualifications of the onsite personnel listed below to assure that they met requirements of references (a) and (b).

Manager Plant Operations	R. Morgan
Maintenance Manager	M. Hill
I&C Maintenance Supervisor	E. Enzor
Engineering Supervisor	G. Thompson

Manager Technical Support	A. Bishop
E&C Supervisor	C. Robertson
Chemist Technician II	J. Roycraft
Engineer	E. Reynolds
Mechanic	M. Clark
Electrician	R. Perrone
Engineering Technician I	D. Phipps

Within this area, no violations or deviations were identified.

9. Calibration (56700)

References: (a) Corporate Quality Assurance Program, Section 9, Calibration Control, Revision 1
 (b) MP-01, Control of Measuring Devices and Test Equipment, Revision 15
 (c) MP-03, Calibration of Process Instrumentation, Revision 18

The inspector reviewed the licensee's calibration program as described in references (a) through (c). The inspector selected various instruments and instrument channels for this review and verified that documentation was complete, acceptance criteria was met (or work requests written to correct the item/component), and proper revisions of the calibration procedures were used.

Within this area, no violations or deviations were identified.

10. Surveillance (61700)

References: (a) Corporate Quality Assurance Program, Section 10, Surveillance, Revision 0
 (b) ASME Boiler and Pressure Vessel Code, Section XI, 1977 Edition through Summer 1978 Addendum

The inspector reviewed the licensee's surveillance program as described in references (a) and (b). The inspector reviewed selected test results and verified that surveillances were performed within the required frequency, data met the required acceptance criteria, proper corrective action was taken when items failed their acceptance criteria, and data had been reviewed and accepted.

Within this area, no violations or deviations were identified.