



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

Report Nos.: 50-325/85-01 and 50-324/85-01

Licensee: Carolina Power and Light Company
 411 Fayetteville Street
 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 7-11, 1985

Inspectors: W.K. Poertner for 2/18/85
 P. D. Wagner Date Signed

W.K. Poertner 2/18/85
 W. K. Poertner Date Signed

Approved by: C. Julian 2/14/85
 C. A. Julian, Section Chief Date Signed
 Operational Program Branch
 Division of Reactor Safety

SUMMARY

Scope: This routine, unannounced inspection entailed 76 inspector-hours on site in the areas of non-licensed personnel training and licensed operator requalification/replacement training.

Results: Of the two areas inspected one apparent violation and one apparent deviation were identified (Failure to remove a licensed operator from licensed duties subsequent to failing the annual operating examination, paragraph 6.a; Failure of an SRO upgrade candidate to satisfactorily complete all required training prior to taking the NRC SRO examination, paragraph 6.a).

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REPORT DETAILS

1. Licensee Employees Contacted

- *C. R. Dietz, Plant General Manager
- *M. D. Hill, Manager - Technical and Administrative Support
- *M. J. Allen, Technical Aid - Regulatory Compliance
- *D. E. Novotny, Senior Specialist - Regulatory Compliance
- *L. E. Jones, Director QA/QC - Brunswick
- *J. W. Chase, Manager - Operations
- *K. E. Enzor, Director - Regulatory Compliance
- *L. E. Boyer, Director - Administrative Support
- *A. G. Cheatham, Manager - Environmental and Radiation Control
- *J. O'Sullivan, Manager - Maintenance
- *R. D. Creech, I and C/E Maintenance Supervisor
- *W. J. Dorman, QA Supervisor
- *B. E. Hinkley, Engineering Supervisor
- *P. C. Hopkins, Director of Training
- *J. D. Wilcox, Principal Engineer - Operations

Other licensee employees contacted included instructors, and training support personnel.

NRC Resident Inspectors

- *D. O. Myers
- *T. E. Hicks

*Attended exit interview

2. Exit Interview

The inspection scope and preliminary findings were summarized on January 11, 1985, with those persons indicated in paragraph 1 above. The licensee did not identify as proprietary any of the materials provided to or reviewed by the inspectors during this inspection. After regional review, inspection findings were discussed with licensee representatives via telephone on February 1, 1985.

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve violations or deviations. New unresolved items identified during this inspection are discussed in paragraphs 6.b, 6.c, and 6.d.

5. Training (41700)

a. General Employee Training (GET)

The licensee's General Employee Training program is established in Brunswick instruction TI-300, Revision 008. This program is required for all employees who work unescorted within the protected area, including those who are not CP&L Brunswick plant employees. The GET program covers security, communications, emergency plan, fire protection, safety and radiation protection. Employees are required to pass a written examination upon completion of the training. Employees are required to attend annual retraining and must pass a requalification examination as well as satisfactorily complete practical demonstrations in radiation protection.

The inspector interviewed a GET instructor and a GET supervisor. Selected training records were reviewed and a portion of the GET classroom presentation was observed, GET student handouts were also reviewed.

The inspectors found the GET program to be in accordance with instruction TI-300 and ANSI N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel." The observed lecture was conducted in a professional manner. The students were both attentive and responsive. The instructor explained key points clearly and answered all questions proficiently. The GET student handouts, including workbooks, appeared accurate.

b. Shift Technical Advisor (STA) Training and Requalification

The Shift Technical Advisor (STA) training program is established in Brunswick instruction TI-602, Revision 2. TI-602 specifies the following requirements with respect to STA training and requalification:

Education: BS degree in engineering or science

Initial Training:

Engineering and theory fundamentals	200 hours (approximately)
Management/supervisory	40 hours (approximately)
Systems	200 hours (approximately)
Administrative controls	20 hours (approximately)
General operating procedures	8 hours (approximately)
Transient/accident analysis	40 hours (approximately)
Simulator	30 hours (approximately)
On-the-job training	200 hours (approximately)

Annual Retraining: 80 hours (approximately)

In order to meet the requirements of TI-602, STA candidates are enrolled in the Reactor Operator Hot Licensing classes and participate in the Senior Reactor Operator (SRO) Upgrade Program. Upon successful completion of these programs, the individual is certified as a STA. Annual retraining requirements are fulfilled by enrollment of certified STA's in the annual SRO requalification program. In the event a certified STA is deficient on the annual requalification examination, the individual is removed from STA duties and placed in an accelerated requalification program.

Selected STA training records were reviewed by the inspectors. The inspectors verified that all STA's fulfilled the education requirement of TI-602. The majority of STA's currently hold SRO licenses. The inspectors concluded that the licensee meets the intent of NUREG-0737, Item I.A.1.1, "Shift Technical Advisor" and Item II.B.4, "Training for Mitigating Core Damage." The curriculum provided to STA candidates with respect to mitigating core damage was reviewed and meets the minimum requirements established in the letter from H. R. Denton, NRC, to "All Power Reactor Applicants and Licensees," dated March 28, 1980.

c. Maintenance Training

The maintenance training program is specified in Brunswick Maintenance Procedure: MP-49, Revision 000. This procedure specifies the minimum job-related training for mechanical, electrical and I&C personnel. One method of performing on-the-job training and proficiency training is by using qualification cards which augment the formal classroom instruction. These qualification cards are located in the following training instructions:

- TI-101, Revision 4: Related Technical Training and On-the-Job Training for Instrumentation and Control Technicians
- TI-102, Revision 4: Related Technical Training and On-the-Job Training for Mechanics
- TI-105, Revision 2: Related Technical Training and On-the-Job Training for Electricians

The inspectors reviewed the above procedures and found the licensee to be in compliance with them. Brunswick is currently in a transition period with respect to its maintenance training. The Craft and Technical Development Program is expected to be implemented beginning in April 1985. This program will prescribe five distinct levels of training for each maintenance discipline. Each level requires technicians to become proficient in various job factors or skills. Prior to progressing to the next higher level, the employee must demonstrate competency by successfully passing a test given at the corporate training center. The use of qualification cards will remain a part of the Craft and Technical Development Program.

6. Requalification Training (41701)

The inspectors reviewed the Licensee's Requalification Training Program for 1984 to determine conformance with the requirements of 10 CFR 55, the Brunswick Final Safety Analysis Report and Brunswick Training Instruction (TI)-200, Brunswick Plant Operator Retraining Program. The Brunswick requalification program consists of four parts:

1. preplanned lecture series
2. simulator retraining
3. on-the-job training
4. evaluation

The lecture and simulator training is divided into three phases and each phase is one week in duration. The Operations Department is presently on a six shift schedule with every fifth week devoted to training.

The inspectors reviewed the 1984 annual written exams administered to the licensed operators. The exams were structured in the same format used by the NRC and the questions appeared similar, in format and difficulty, to the questions asked in NRC requalification exams.

The inspectors reviewed selected lesson plans and system descriptions used in the training of licensed operators. The material appeared adequate and up-to-date. The inspector monitored a lecture provided to the licensed operators. The instructor was prepared and responsive to the questions asked by the students. The students were attentive and motivated. A professional atmosphere conducive to learning was maintained by all throughout the lecture.

The inspectors reviewed selected SRO and RO requalification records for adequacy. The inspectors also reviewed the records of selected instructors who teach system integrated responses, transient, and simulator courses to licensed operators.

Within this area one violation, one deviation and three unresolved items were identified. These items are discussed in the following paragraphs.

- a. When asked by the inspectors to identify any individuals that had performed poorly on the annual requalification exam and been placed in an accelerated requalification program, the licensee stated that all individuals had passed the annual requalification examination. The inspectors identified one reactor operator that was enrolled in the SRO upgrade program and did not meet the requirement of an overall grade of greater than 80% on the final written exam. This individual was administered no other exam in 1984 that met the requirements for an annual written examination. TI-200 states that "An annual written examination shall be administered to all licensed and certified personnel each calendar year", TI-200 also states that "Any licensed or certified individual that fails a written or operating exam will be

removed from licensed duties and placed in an accelerated requalification program." This is a violation (325, 324/85-01-01).

This individual was administered an NRC SRO upgrade exam on November 12, 1984 and failed to meet the requirements for passing the examination, in fact, the individual was removed from licensed duties due to his poor performance on section seven of the NRC SRO upgrade examination. NRC form 398, Personnel Qualifications Statement - Licensee, which is used to apply for an NRC SRO upgrade examination states: "I certify that the above named individual has or will have completed by the time of examination all the required training and has learned to operate the controls in a competent and safe manner pursuant to title 10, Code of Federal Regulations, Part 55, and that the individual has a need for an Operator/Senior Operator Licensee to perform his/her assigned duties." This statement is signed by the training coordinator and the highest level of corporate management for plant operation. This statement, "has or will have completed by the time of examination all the required training," is a commitment to the NRC that the individual will have successfully passed all the training prior to being administered an NRC exam. The individual did not pass the CP&L administered SRO upgrade exam. The individual was not administered another examination nor was the NRC notified of his failure to pass the exam prior to administering the individual an NRC SRO upgrade examination. This is a deviation (325, 324/85-01-02).

- b. 10 CFR 55.31(e) states: "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 activities licensed pursuant to this part, demonstrate to the commission that his knowledge and understanding of facility operation and administration are satisfactory." The inspectors identified two simulator instructors that had not stood a watch in the control room in excess of nine months and then assumed the duties of a Senior Reactor Operator in the control room. The interpretation of "actively performing the functions of an operator or senior operator" with regard to 10 CFR 55.31(e) will be further reviewed by Region II. Until resolution, this will remain an unresolved item (325, 324/85-01-03).
- c. Training Instruction TI-200, Revision 008, Section 3.2.3.1 states "During the fourth quarter, a complete walk-through of Control Room inaccessibility will be conducted individually or as a group (this training is not available in the simulator)." This walk-through was not conducted during the fourth quarter of 1984. However, a CP&L memorandum dated November 14, 1984, delineated several scheduling and implementation restrictions which precluded achieving the required training on time. The memorandum stated that the training was planned to be conducted during the first quarter of 1985. The Brunswick Plant General Manager verbally committed at the exit interview on January 11, 1985, that this training would be conducted during the first quarter of 1985. Until the walk-through of Control Room inaccessibility is conducted, this will remain an unresolved item (325, 324/85-01-04).

- d. The 1983 annual requalification exams were administered in June and July of 1983. The 1984 annual requalification exams were administered in October and November of 1984. Region II has taken a position that successive annual requalification exams will be administered within a twelve month \pm two month time frame and that if the annual requalification exam cannot be given at this periodicity, an exemption from the NRC must be granted as per 10 CFR 50.54(i-1). This matter will be further reviewed in the region. Until resolution, this will remain an unresolved item (325, 324/85-01-05).