

May 25, 1984

Docket Nos. 50-325/324

Mr. E. E. Utley
Executive Vice President
Carolina Power & Light Company
Post Office Box 1551
Raleigh, North Carolina 27602

Dear Mr. Utley:

The Commission has issued the enclosed Amendment Nos. 70 and 98 to Facility Operating License Nos. DPR-71 and DPR-62 for the Brunswick Steam Electric Plant, Units 1 and 2. The amendments consist of changes to the licenses and Technical Specifications in response to your submittals of July 28, 1981, December 10, 1982, and December 29, 1983.

The amendment revises the Technical Specifications regarding the CP&L's management organization structure and reporting requirements.

A copy of the related Safety Evaluation is also enclosed.

Sincerely,

Original signed by:

Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Enclosures:

1. Amendment No. 70 to License No. DPR-71
2. Amendment No. 98 to License No. DPR-62
3. Safety Evaluation

cc w/enclosures:
See next page

DISTRIBUTION

Docket File	NRC PDR	Local PDR	ORB#2 Rdg.	DEisenhut
SNorris	SMackKay	MGrotenhuis	Gray File	SECY
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03/11/84

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GLattas
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[Handwritten signatures and initials]

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-325

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 70
License No. DPR-71

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company (the licensee) dated July 28, 1981, as supplemented December 10, 1982, and December 29, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, Facility Operating License No. DPR-71 is hereby amended by deleting paragraphs 2.I and 2.J. The license is further amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 70, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief
Operating Reactors Branch #2
Division of Licensing

Attachment:
Changes to the
Technical Specifications

Date of Issuance: May 25, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 70

FACILITY OPERATING LICENSE NO. DPR-71

DOCKET NO 50-325

Revise the Appendix A Technical Specifications as follows:

<u>Remove</u>	<u>Insert</u>
XIV	XIV
XV	XV
XVI	XVI
6-1 Thru 6-27	6-1 Thru 6-33

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6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The General Manager - Brunswick Plant shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

OFFSITE

6.2.1 The offsite organization for facility management and technical support shall be as shown on Figure 6.2.1-1.

FACILITY STAFF

6.2.2 The facility organization shall be as shown on Figures 6.2.2-1 and 6.2.2-2 and:

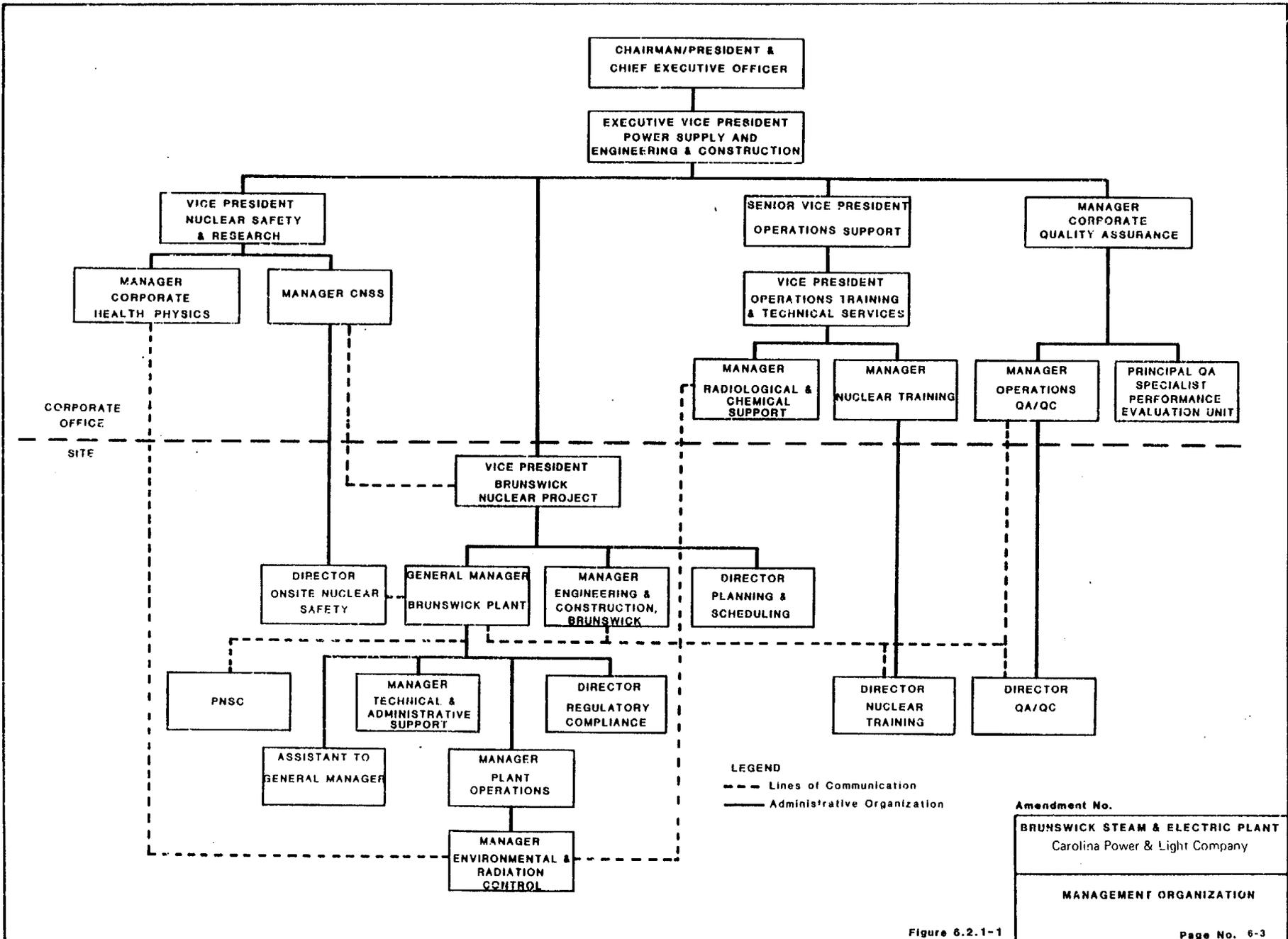
- a. Each facility on duty shift shall be composed of at least the minimum facility shift crew composition shown in Table 6.2.2-1.
- b. At least one licensed Reactor Operator shall be in the control room when fuel is in the reactor.
- c. When either reactor is in OPERATIONAL CONDITION 1, 2, or 3, at least one licensed Senior Reactor Operator shall be in the control room.
- d. An individual qualified to implement radiation protection procedures shall be onsite when fuel is in either reactor.*
- e. All CORE ALTERATIONS shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- f. A Fire Brigade of at least five members shall be maintained onsite at all times.* The Fire Brigade shall not include the minimum shift crew shown in Table 6.2.2-1 or any personnel required for other essential functions during a fire emergency.

* The individual qualified to implement radiation protection procedures and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed two hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

ADMINISTRATIVE CONTROLS

FACILITY STAFF (Continued)

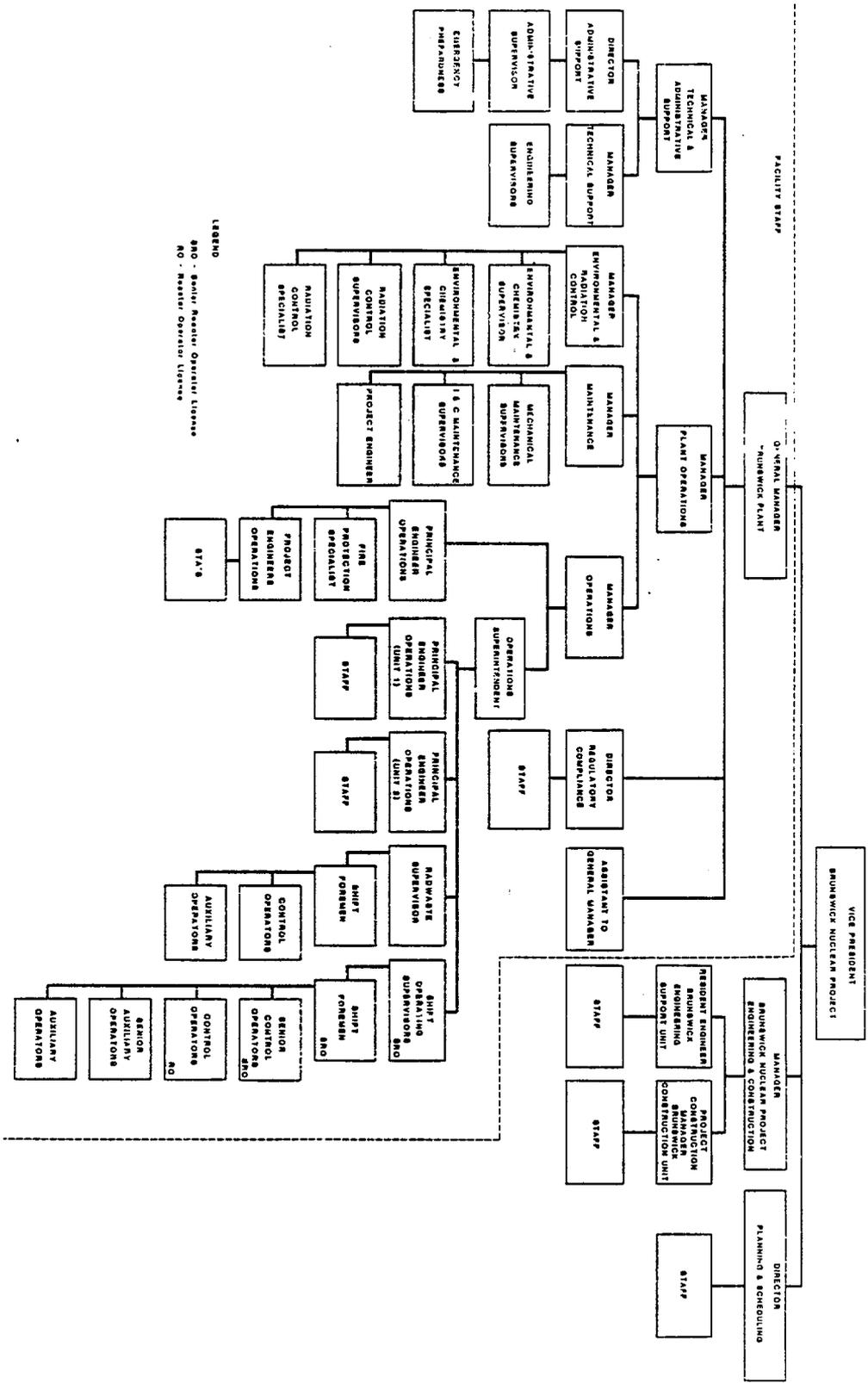
- g. Administrative procedures shall be developed and implemented to limit the working hours of facility staff who perform safety-related functions; e.g., senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel. These procedures shall meet the working hour guidelines published by the Commission in Generic Letter No. 82-12.



LEGEND
 - - - Lines of Communication
 — Administrative Organization

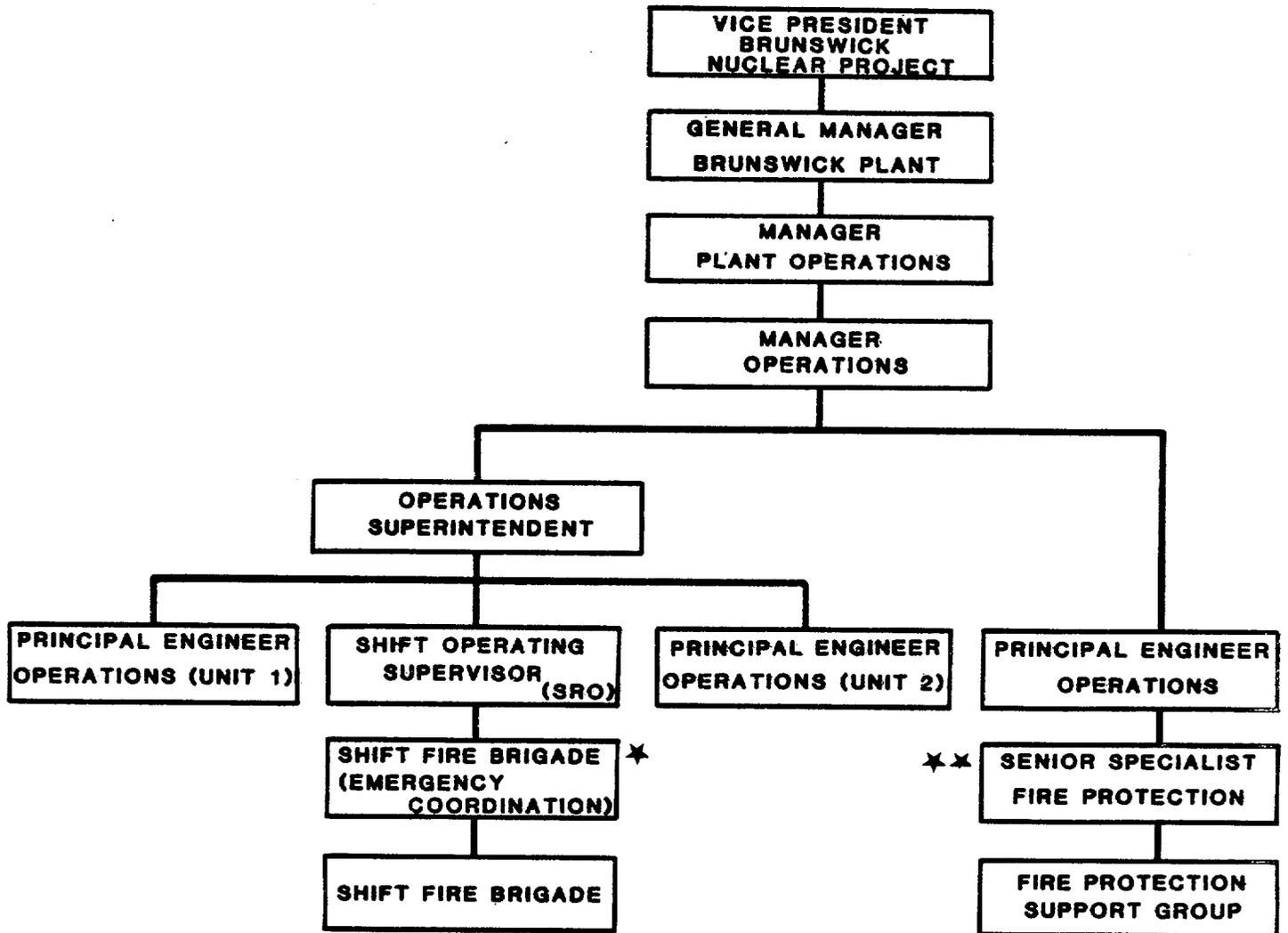
Amendment No.
 BRUNSWICK STEAM & ELECTRIC PLANT
 Carolina Power & Light Company
 MANAGEMENT ORGANIZATION

Figure 6.2.1-1



LEGEND
 NO - Senior Reactor Operator License
 NO - Reactor Operator License

Figure 6.2-2-1



LEGEND

★ Number of Brigade Fire Chiefs varies with Shift Organization

★★ One Specialist is Assigned The Duties of The Plant Fire Chief

Amendment No.

**BRUNSWICK STEAM &
ELECTRIC PLANT**

Carolina
Power & Light Company

PLANT FIRE PROTECTION ORGANIZATION

Figure 6.2.2-2

Page No. 6-5

Amendment 70

TABLE 6.2.2-1
MINIMUM FACILITY SHIFT CREW COMPOSITION

WITH UNIT 2 IN CONDITION 1, 2, OR 3		
POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	CONDITIONS 1, 2, & 3	CONDITIONS 4 & 5
SOS	1	1 ^(b)
SRO ^(a)	1	1 ^(b)
RO ^(a)	3	3
AO	3	3
STA	1	1

WITH UNIT 2 IN CONDITION 4 OR 5		
POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	CONDITIONS 1, 2, & 3	CONDITIONS 4 & 5
SOS	1	1 ^(b)
SRO ^(a)	1	1 ^(b)
RO ^(a)	3	2
AO	3	3
STA	1	None

WITH UNIT 2 DE-FUELED		
POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	CONDITIONS 1, 2, & 3	CONDITIONS 4 & 5
SOS	1	1 ^(b)
SRO ^(a)	1	1 ^(b)
RO ^(a)	2	2
AO	3	3
STA	1	None

TABLE 6.2.2-1 (Continued)

MINIMUM FACILITY SHIFT CREW COMPOSITION

TABLE NOTATION

SOS - Shift Operating Supervisor with a Senior Reactor Operators License
SRO - Individual with a Senior Reactor Operators License
RO - Individual with a Reactor Operators License
AO - Auxiliary Operator (non-licensed individual)
STA - Shift Technical Advisor

(a) Assumes each individual is licensed on both plants.

(b) Does not include the licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising CORE ALTERATIONS.

The Shift Crew Composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2.2-1.

ADMINISTRATIVE CONTROLS

6.2.3 ONSITE NUCLEAR SAFETY (ONS)

FUNCTION

6.2.3.1 The ONS Unit shall function to examine facility operating characteristics, NRC issues, industry advisories, and other sources which may indicate areas for improving facility safety.

RESPONSIBILITIES

6.2.3.2 The ONS Unit shall be responsible for maintaining surveillance of facility activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

AUTHORITY

6.2.3.3 The ONS Unit shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving facility safety to the Manager-Corporate Nuclear Safety Section.

6.2.4 SHIFT TECHNICAL ADVISOR

6.2.4.1 The Shift Technical Advisor shall serve in an advisory capacity to the Shift Operating Supervisor on matters pertaining to the engineering aspects assuring safe operation of the unit.

6.3 FACILITY STAFF QUALIFICATION

6.3.1 Each member of the facility staff defined in Figure 6.2.2-1 shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the Manager - Environmental & Radiation Control who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975 and (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant during transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Director - Training and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

6.4.2 A training program for the Fire Brigade shall be maintained under the direction of the Manager-Operations and shall meet or exceed the requirements of Section 27 of the NFPA Code-1975.

* Not responsible for sign-off function.

ADMINISTRATIVE CONTROLS

6.5 REVIEW AND AUDIT

6.5.1 NUCLEAR SAFETY REVIEWERS

6.5.1.1 Individuals shall be designated/approved by the General Manager - Brunswick Plant for performing nuclear safety reviews.

6.5.1.2 Individuals designated under Specification 6.5.1.1 above shall have an academic degree in an engineering or related field or equivalent and two years related experience.

6.5.1.3 A list shall be maintained of individuals qualified to perform nuclear safety reviews, including additional individuals whose expertise may be necessary during the reviews to assure that the reviewers collectively possess the background and qualifications in the disciplines necessary and important to the specific review.

6.5.1.4 The list specified in Specification 6.5.1.3 above shall include the disciplines for which each individual is qualified.

6.5.1.5 For those cases where interdisciplinary reviews are required, as many individuals as necessary shall be used to perform the nuclear review function.

6.5.1.6 One of the two nuclear safety reviewers shall be an individual other than the original preparer or the individual approving the action.

6.5.2 SAFETY EVALUATIONS AND NUCLEAR REVIEW CONTROL

SAFETY EVALUATIONS

6.5.2.1 A safety evaluation shall be prepared for each of the following:

- a. Changes to procedures required by Specification 6.8, or changes to other procedures that affect nuclear safety.
- b. Proposed tests or experiments that affect nuclear safety.
- c. Proposed modifications to plant systems or equipment that affect nuclear safety.
- d. Proposed changes to the Technical Specifications.
- e. Proposed changes to the Operating License.

6.5.2.2 Two nuclear safety reviews of the item and safety evaluation(s) prepared in accordance with Specification 6.5.2.1 above shall be performed prior to approval and implementation.

6.5.2.3 The item and associated safety evaluation(s) shall be examined in order to determine whether an interdisciplinary review is required in accordance with Specification 6.5.1.5 above.

ADMINISTRATIVE CONTROLS

PROCEDURES, TESTS, AND EXPERIMENTS

6.5.2.4 The safety evaluation prepared in accordance with Specifications 6.5.2.1.a and 6.5.2.1.b above shall include a written determination, with basis, of whether or not the procedures, proposed tests and experiments, and changes thereto constitute an unreviewed safety question as defined in 10 CFR 50.59, or whether they involve a change to the Technical Specifications.

6.5.2.5 Following the nuclear safety review, the procedures required by Specification 6.8, other procedures that affect nuclear safety, proposed tests or experiments, and changes thereto (other than editorial or typographical) which have been determined to not involve an unreviewed safety question as defined in 10 CFR 50.59 or change to the Technical Specifications shall be approved prior to implementation by the General Manager - Brunswick Plant or his previously designated alternate.

MODIFICATIONS

6.5.2.6 The safety evaluation prepared in accordance with Specification 6.5.2.1.c above shall include a written determination, with basis, of whether or not the proposed modification is a change in the facility as described in the safety analysis report, involves a change to the Technical Specifications, or constitutes an unreviewed safety question as defined in 10 CFR 50.59.

6.5.2.7 Following the nuclear safety review, proposed modifications which have been determined to not involve an unreviewed safety question as defined in 10 CFR 50.59 or a change to the Technical Specifications shall be approved by the General Manager - Brunswick Plant or his previously designated alternate.

OPERATING LICENSE/TECHNICAL SPECIFICATIONS

6.5.2.8 The safety evaluation prepared in accordance with Specifications 6.5.2.1.d and 6.5.2.1.e above shall include a written preliminary determination, with basis, of whether or not the proposed Operating License/Technical Specification change(s) is a change in the facility as described in the safety analysis report.

6.5.2.9 Following the nuclear safety review of the safety evaluation prepared in accordance with Specifications 6.5.2.1.d and 6.5.2.1.e above and the associated proposed action, the request shall be:

- a. Reviewed by the Plant Nuclear Safety Committee in accordance with Specification 6.5.3.8.
- b. Reviewed by the Corporate Nuclear Safety Section in accordance with Specification 6.5.4.9.

ADMINISTRATIVE CONTROLS

6.5.3 PLANT NUCLEAR SAFETY COMMITTEE (PNSC)

FUNCTION

6.5.3.1 As an effective means for the regular review, overview, evaluation, and maintenance of plant operational safety, a Plant Nuclear Safety Committee (PNSC) shall be established.

6.5.3.2 The PNSC shall function through the utilization of subcommittees, audits, investigations, reports, and/or performance of reviews as a group.

COMPOSITION

6.5.3.3 The PNSC shall be composed of the:

Chairman:	General Manager - Brunswick Plant*
Member:	Manager - Plant Operations
Member:	Manager - Technical & Administrative Support
Member:	Manager - Technical Support
Member:	Manager - Operations
Member:	Manager - Maintenance
Member:	Manager - Environmental & Radiation Control
Member:	Assistant to Plant General Manager
Member:	Director - QA/QC
Member:	Director - Regulatory Compliance
Member:	Director - Administrative Support

ALTERNATES

6.5.3.4 All alternate members shall be appointed in writing by the PNSC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as members at any one time.

6.5.3.5 All alternates, shall as a minimum, meet equivalent qualification criteria as specified for professional-technical personnel in Section 4.4 of ANSI N18.1-1971.

MEETING FREQUENCY

6.5.3.6 The PNSC shall meet at least once per calendar month and as convened by the PNSC Chairman or his designated alternate.

QUORUM

6.5.3.7 The minimum quorum of the PNSC necessary for the performance of the PNSC activities of the Technical Specifications shall consist of the PNSC Chairman or his designated alternate and five members including alternates. No more than two alternates shall be counted toward meeting the minimum quorum requirement.

* Or designated alternate.

ADMINISTRATIVE CONTROLS

ACTIVITIES

6.5.3.8 The PNSC activities shall include the following:

- a. Review of all procedures required by Specification 6.8 and changes thereto (and any other procedures and changes thereto), any of which constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- b. Review of all proposed tests or experiments that constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- c. Review of all proposed modifications that constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- d. Review of all proposed changes to the Technical Specifications or Operating License, prior to implementation.
- e. Review of reports on violations of Technical Specifications including reports covering evaluation and recommendations to prevent recurrence to the Vice President - Brunswick Nuclear Project and to the Manager - Corporate Nuclear Safety Section.
- f. Performance of special reviews, investigations (or analyses), and reports thereon as requested by the Manager - Corporate Nuclear Safety Section.
- g. Review of events requiring 24 hours written notification to the Commission.
- h. Review of facility operations to detect potential nuclear safety hazards.
- i. Annual review of the Security Plan.
- j. Annual review of the Emergency Plan.
- k. Review of accidental, unplanned, or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Vice President - Brunswick Nuclear Project and the Manager - Corporate Nuclear Safety Section.
- l. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL.

ADMINISTRATIVE CONTROLS

AUTHORITY

6.5.3.9 If there is a disagreement between recommendations of a majority of the PNSC and the actions contemplated by the General Manager - Brunswick Plant, the PNSC shall provide written notification within 24 hours to the Vice President - Brunswick Nuclear Project and the Vice President - Corporate Nuclear Safety and Research. The course determined by the General Manager - Brunswick Plant to be the most conservative shall be followed.

RECORDS

6.5.3.10 The PNSC shall maintain written minutes of each PNSC meeting that, at a minimum, document the results of all PNSC activities performed under the provisions of these Technical Specifications. Copies shall be provided to the Vice President - Brunswick Nuclear Project and the Manager - Corporate Nuclear Safety Section.

6.5.4 CORPORATE NUCLEAR SAFETY SECTION

FUNCTION

6.5.4.1 The Corporate Nuclear Safety Section (CNSS) of the Corporate Nuclear Safety & Research Department shall function to provide independent review of significant plant changes, tests, and procedures; verify that REPORTABLE OCCURRENCES are investigated in a timely manner and corrected in a manner that reduces the probability of recurrence of such events; and detect trends that may not be apparent to a day-to-day observer.

ORGANIZATION

6.5.4.2 The individuals assigned responsibility for independent reviews shall be specified in technical disciplines. These individuals shall collectively have the experience and competence required to review activities in the following areas:

- a. nuclear power plant operations
- b. nuclear engineering
- c. chemistry and radiochemistry
- d. metallurgy
- e. non-destructive testing
- f. instrumentation and control
- g. radiological safety
- h. mechanical and electrical engineering
- i. administrative controls

ADMINISTRATIVE CONTROLS

ORGANIZATION (Continued)

- j. seismic and environmental
- k. quality assurance practices
- l. Other appropriate fields associated with the unique characteristics of the nuclear power plant.

6.5.4.3 The Manager - Corporate Nuclear Safety Section shall have an academic degree in an engineering or related field and, in addition, shall have a minimum of ten years related experience, of which a minimum of five years shall be in the operation and/or design of nuclear power plants.

6.5.4.4 The independent safety review program reviewers shall have an academic degree in an engineering or related field or equivalent and, in addition, shall have a minimum of five years related experience.

6.5.4.5 An individual may possess competence in more than one specialty area. If sufficient expertise is not available within the Corporate Nuclear Safety Section, competent individuals from other Carolina Power & Light Company organizations or outside consultants shall be utilized in performing independent reviews and investigations.

6.5.4.6 At least three individuals, qualified as discussed in 6.5.4.4 above shall review each item submitted under the requirements of Section 6.5.4.9.

6.5.4.7 Independent safety reviews shall be performed by individuals not directly involved with the activity under review or responsible for the activity under review.

6.5.4.8 The Corporate Nuclear Safety Section independent safety review program shall be conducted in accordance with written, approved procedures.

REVIEW

6.5.4.9 The Corporate Nuclear Safety Section shall perform reviews of the following:

- a. The safety evaluations for 1) changes to procedures required by Specification 6.8, 2) modifications of equipment or systems, and 3) tests or experiments that constitute a change to the safety analysis report to verify that such actions did not constitute an unreviewed safety question or involve a change to the Technical Specifications. Implementation may proceed prior to completion of this review.
- b. Proposed changes to procedures required by Specification 6.8, and proposed modifications that constitute an unreviewed safety question as defined in 10 CFR 50.59 or a change to the Technical Specifications, prior to implementation.

ADMINISTRATIVE CONTROLS

REVIEW (Continued)

- c. Proposed tests or experiments that involve an unreviewed safety question as defined in 10 CFR 50.59 or a change to the Technical Specifications, prior to implementation.
- d. Proposed changes to the Technical Specifications and Operating License.
- e. Violations, deviations, and events requiring 24 hour written notification to the Commission, such as:
 - 1. Violations of applicable codes, regulations, orders, Technical Specifications, license requirements, and internal procedures or instructions having nuclear safety significance.
 - 2. Significant operating abnormalities or deviations from normal and expected performance of plant safety-related structures, systems, or components.
- f. Reports and minutes of the PNSC.
- g. Any other matter involving safe operation of the nuclear power plant that the Manager - Corporate Nuclear Safety Section deems appropriate for consideration or which is referred to the Manager - Corporate Nuclear Safety Section by the on-site operating organization or other functional organizational units within Carolina Power & Light Company.

6.5.4.10 Review of items considered under 6.5.4.9(e) through (g) above shall include the results of any investigations made and the recommendations resulting from these investigations to prevent or reduce the probability of recurrence of the event.

RECORDS

6.5.4.11 Records of Corporate Nuclear Safety Section reviews, including recommendations and concerns, shall be prepared and distributed as indicated below:

- a. Copies of documented reviews shall be retained in the CNSS files.
- b. Recommendations and concerns shall be submitted to the General Manager - Brunswick Nuclear Project and Vice President - Brunswick Plant, within 14 days of completion of the review.
- c. A summation of Corporate Nuclear Safety recommendations and concerns shall be submitted to the Chairman/President and Chief Executive Officer; Executive Vice President - Power Supply and Engineering and Construction; Vice President - Corporate Nuclear Safety and Research; Vice President - Brunswick Nuclear Project; General Manager - Brunswick Plant; and others, appropriate, on at least a bi-monthly frequency.

ADMINISTRATIVE CONTROLS

6.5.5 CORPORATE QUALITY ASSURANCE AUDIT PROGRAM

FUNCTION

6.5.5.1 The Performance Evaluation Unit (PEU) of the Corporate Quality Assurance Department shall function to perform audits of facility activities specified in Specification 6.5.5.2.

AUDITS

6.5.5.2 Audits of facility activities shall be performed by the PEU. These audits shall encompass:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The training and qualifications of the entire facility staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems, or methods of operation that affect nuclear safety at least once per 6 months.
- d. The verification of compliance and implementation of the requirements of the Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.
- e. The Emergency Plan and implementing procedures at least once per 12 months.
- f. The Security Plan and implementing procedures at least once per 12 months.
- g. The Facility Fire Protection Program and implementing procedures at least once per 12 months.
- h. The radiological environmental monitoring program and the results thereof at least once per 12 months.
- i. The OFFSITE DOSE CALCULATIONAL MANUAL and implementing procedures at least once per 24 months.
- j. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes at least once per 24 months.

ADMINISTRATIVE CONTROLS

AUDITS (Continued)

- k. The performance of activities required by the Quality Assurance 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.
- l. Any other area of facility operation considered appropriate by the Manager - Quality Assurance Services Section.

6.5.5.3 Personnel performing the quality assurance audits shall have access to the plant operating records.

RECORDS

6.5.5.4 Records of audits shall be prepared and retained.

6.5.5.5 Audit reports encompassed by 6.5.5.2 above shall be prepared, approved by the Principal QA Specialist - Performance Evaluation Unit, and forwarded to the Executive Vice President - Power Supply and Engineering and Construction; Vice President - Brunswick Nuclear Project; Vice President - Corporate Nuclear Safety and Research; General Manager - Brunswick Plant; and others, as appropriate, within 30 days after completion of the audit.

AUTHORITY

6.5.5.6 The Manager - Quality Assurance Services Section under the Manager - Corporate Quality Assurance shall be responsible for the following:

- a. The administering of the Corporate Quality Assurance Audit Program.
- b. The approval of the individual(s) selected to conduct quality assurance audits.

PERSONNEL

6.5.5.7 Audit personnel shall be independent of the area audited.

6.5.5.8 Selection of personnel for auditing assignments shall be based on experience or training that establishes that their qualifications are commensurate with the complexity or special nature of the activities to be audited. In selecting audit personnel, consideration shall be given to special abilities, specialized technical training, prior pertinent experience, personal characteristics, and education.

6.5.5.9 Qualified outside consultants or other individuals independent from those personnel directly involved in plant operation shall be used to augment the audit teams when necessary.

ADMINISTRATIVE CONTROLS

6.5.6 OUTSIDE AGENCY INSPECTION AND AUDIT PROGRAM

6.5.6.1 An independent fire protection and loss prevention inspection and audit shall be performed at least once per 12 months utilizing either qualified offsite licensee personnel or an outside fire protection firm.

6.5.6.2 An inspection and audit of the fire protection and loss prevention program shall be performed by an outside qualified fire consultant at intervals no greater than 36 months.

6.6 REPORTABLE OCCURRENCE ACTION

6.6.1 The following actions shall be taken for REPORTABLE OCCURRENCES:

- a. The Commission shall be notified and/or a report submitted pursuant to the requirements of Specification 6.9.
- b. Each REPORTABLE OCCURRENCE requiring 24 hour notification to the Commission shall be reviewed by the General Manager - Brunswick Plant and submitted to the Manager - Corporate Nuclear Safety Section and the Vice President - Brunswick Nuclear Project.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The facility shall be placed in at least HOT SHUTDOWN within two hours.
- b. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within one hour. The Vice President - Brunswick Nuclear Project and the Manager - Corporate Nuclear Safety Section shall be notified within 24 hours.
- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the General Manager - Brunswick Plant. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems, or structures, and (3) corrective action taken to prevent recurrence.
- d. The Safety Limit Violation Report shall be submitted to the Commission, the Vice President - Brunswick Nuclear Project, and the Manager - Corporate Nuclear Safety Section within 14 days of the violation.

ADMINISTRATIVE CONTROLS

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, November 1972.
- b. Refueling operations.
- c. Surveillance and test activities of safety related equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Fire Protection Program implementation.
- g. OFFSITE DOSE CALCULATION MANUAL implementation.
- h. PROCESS CONTROL PROGRAM implementation.
- i. Quality Assurance Program for effluent and environmental monitoring using the guidance in Regulatory Guide 1.21, Revision 1, June 1974, and Regulatory Guide 4.1, Revision 1, April 1975.

6.8.2 Temporary changes to procedures of Specification 6.8.1 above, any other procedures that affect nuclear safety, and proposed tests or experiments may be made provided:

- a. The intent of the original procedure, proposed test or experiment is not altered.
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator License on the unit affected.
- c. The change is documented, reviewed pursuant to Specifications 6.5.2.1 and 6.5.2.2 and approved by the General Manager - Brunswick Plant or his previously designated alternate within 14 days of implementation.

6.8.3 The following programs shall be established, implemented, and maintained:

- a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The program shall include the following:

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS (Continued)

1. Preventive maintenance and periodic visual inspection requirements, and
2. Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel,
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

c. Post-Accident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

1. Training of personnel,
2. Procedures for sampling and analysis, and
3. Provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the Regional Office unless otherwise noted.

STARTUP REPORTS

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

ADMINISTRATIVE CONTROLS

STARTUP REPORTS (Continued)

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events, i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation, supplementary reports shall be submitted at least every three months until all three events have been completed.

ANNUAL REPORTS^{1/}

6.9.1.4 Annual reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

PERSONNEL EXPOSURE AND MONITORING REPORT^{2/}

6.9.1.5 Reports required on an annual basis shall include a tabulation of the number of station, utility, and other personnel, including contractors, receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions^{2/}, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignments to various duty functions may be estimated, based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20 percent of the individual total dose need not be accounted for. In the aggregate, at least 80 percent of the total whole body dose received from external sources shall be assigned to specific major work functions.

^{1/} A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

^{2/} This tabulation supplements the requirements of §20.407 of 10 CFR Part 20.

ADMINISTRATIVE CONTROLS

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT^{3/}

6.9.1.6 Routine radiological environmental operating reports covering the operation of the facility during the previous calendar year shall be submitted prior to May 1 of each year.

6.9.1.7 The Annual Radiological Environmental Operating Report shall include the following:

- a. Summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with pre-operational studies, with operational controls (as appropriate), and with previous environmental surveillance reports, and an assessment of the observed impact of the plant operation on the environment.
- b. Results of land uses censuses required by Specification 3.12.2.
- c. Results of analysis of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the OFFSITE DOSE CALCULATION MANUAL, as well as summarized and tabulated results of these analyses and measurements in the format of Table 3 in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data should be submitted as soon as possible in a supplementary report.
- d. A summary description of the radiological environmental monitoring program.
- e. At least two legible maps^{4/} covering all sampling locations keyed to a table giving distances and directions from the centerline of one reactor.
- f. The results of licensee participation in the Interlaboratory Comparison Program, required by Specification 3.12.3.

^{3/} A single submittal may be made for a multiple unit station.

^{4/} One map shall cover stations near the SITE BOUNDARY; a second map shall include the more distant stations.

ADMINISTRATIVE CONTROLS

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT (Continued)

- g. Discussion of all deviations from the sampling schedule of Table 3.12.1-1.
- h. Discussion of all analyses in which the LLD required by Table 4.12.1-1 was not achievable.

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT^{5/}

6.9.1.8 Routine radioactive effluent release reports covering the operation of the facility during the previous 6 months of operation shall be submitted within the time periods specified in Specifications 6.9.1.9 and 6.9.1.10 below.

6.9.1.9 The portion of the Semiannual Radioactive Effluent Release Reports to be submitted within 60 days after January 1 and July 1 of each year shall include the following:

- a. A summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the facility as outlined in Regulatory Guide 1.21, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactivity Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," Revision 1, June 1974, with data summarized on a quarterly basis similar to the format of Appendix B thereof.
- b. The information specified below for each class of solid waste (as defined by 10 CFR Part 61, when implemented) shipped offsite during the report period:
 - 1. Container volume,
 - 2. Total curie quantity (specify whether determined by measurement or estimate),
 - 3. Principal radionuclides (specify whether determined by measurement or estimate),
 - 4. Source of waste and processing employed (e.g., dewatered spent resin, compacted dry waste, evaporator bottoms),
 - 5. Type of container (e.g., LSA, Type A, Type B, Large Quantity), and

^{5/} A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

ADMINISTRATIVE CONTROLS

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT (Continued)

6. Solidification agent or absorbent (e.g., cement, urea formaldehyde).
- c. A list of description of unplanned releases from the site to UNRESTRICTED AREAS of radioactive materials in gaseous and liquid effluents made during the reporting period.
- d. Any changes made during the reporting period to the PROCESS CONTROL PROGRAM (PCP) or the OFFSITE DOSE CALCULATION MANUAL (ODCM), as well as a listing of new locations for dose calculations and/or environmental monitoring identified by the land use census pursuant to Specification 3.12.2.

6.9.1.10 The portion of the Semiannual Radioactive Effluent Release Report to be submitted within 90 days after January 1 of each year shall include the following:

- a. An annual summary of hourly meteorological data collected over the previous calendar year. This annual summary may be either in the form of an hour-by-hour listing on magnetic tape of wind speed, wind direction, atmospheric stability, and precipitation (if measured), or in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability.^{6/}
- b. An assessment of the radiation doses due to the radioactive liquid and gaseous effluents released from the station during the previous calendar year.

MONTHLY OPERATING REPORTS

6.9.1.11 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to main steam system safety/relief valves, shall be submitted on a monthly basis to the Director, Office of Resource Management, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office no later than the 15th of each month following the calendar month covered by the report.

^{6/} In lieu of submission with the Semiannual Radioactive Effluent Release Report, the licensee has the option of retaining this summary of required meteorological data in a file that shall be provided to the NRC upon request.

ADMINISTRATIVE CONTROLS

REPORTABLE OCCURRENCES

6.9.1.12 The REPORTABLE OCCURRENCES of Specifications 6.9.1.13 and 6.9.1.14 below, including corrective actions and measures to prevent recurrence, shall be reported to the NRC. Supplemental reports may be required to fully describe final resolution of occurrence. In case of corrected or supplemental reports, a licensee event report shall be completed and reference shall be made to the original report date.

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP

6.9.1.13 The types of events listed below shall be reported within 24 hours by telephone and confirmed by telegraph, mailgram, or facsimile transmission to the Regional Administrator of the Regional Office, or his designate no later than the first working day following the event, with a written followup report within 14 days. The written followup report shall include, as a minimum, a completed copy of the licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. Failure of the reactor protection system or other systems subject to limiting safety system settings to initiate the required protective function by the time a monitored parameter reaches the setpoint specified as the limiting safety system setting in the Technical Specifications or failure to complete the required protective function.

Note: Instrument drift discovered as a result of testing need not be reported under this item (but see 6.9.1.13.e, 6.9.1.13.f, and 6.9.1.14.a below).

- b. Operation of the unit or affected systems when any parameter or operation subject to a limiting condition for operation is less conservative than the least conservative aspect of the limiting condition for operation established in the Technical Specifications.

Note: If specified action is taken when a system is found to be operating between the most conservative and least conservative aspects of a limiting condition for operation listed in the Technical Specifications, the limiting condition for operation is not considered to have been violated and no report need be submitted under this section (but see 6.9.1.14.b below).

ADMINISTRATIVE CONTROLS

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP (Continued)

- c. Abnormal degradation discovered in fuel cladding, reactor coolant pressure boundary, or primary containment.

Note: Leakage of valve packing or gaskets within the limits for identified leakage set forth in Technical Specifications need not be reported under this section.

- d. Reactivity anomalies involving disagreement with predicted value of reactivity balance under steady-state conditions during power operation greater than or equal to 1% $\Delta k/k$; a calculated reactivity balance indicating a SHUTDOWN MARGIN less conservative than specified in the Technical Specifications; short-term reactivity increases that correspond to a reactor period of less than 5 seconds or, if subcritical, an unplanned reactivity insertion of more than 0.5% $\Delta k/k$; or occurrence of any unplanned criticality.
- e. Failure or malfunction of one or more components that prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR.
- f. Personnel error or procedural inadequacy which prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR.

Note: For 6.9.1.13.e and 6.9.1.13.f, reduced redundancy that does not result in loss of system function need not be reported under this section (but see 6.9.1.14.b and 6.9.1.14.c below).

- g. Conditions arising from natural or man-made events that, as a direct result of the event, require plant shutdown, operation of safety systems, or other protective measures required by Technical Specifications.
- h. Errors discovered in the transient or accident analyses or in the methods used for such analyses as described in the safety analysis report or in the bases for the Technical Specifications that have or could have permitted reactor operation in a manner less conservative than assumed in the analyses.
- i. Performance of structures, systems, or components that requires remedial action or corrective measures to prevent operation in a manner less conservative than assumed in the accident analyses in the safety analysis report or Technical Specifications bases; or discovery

ADMINISTRATIVE CONTROLS

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP (Continued)

during plant life of conditions not specifically considered in the safety analysis report or Technical Specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

Note: This item is intended to provide for reporting of potentially generic problems.

- j. Failure or malfunction of the main steam system safety/relief valves.

THIRTY DAY WRITTEN REPORTS

6.9.1.14 The types of events listed below shall be the subject of written reports to the Regional Administrator of the Regional Office within thirty days of occurrence of the event. The written report shall include, as a minimum, a completed copy of the licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the Technical Specifications but which do not prevent the fulfillment of the functional requirements of affected systems (but see 6.9.1.13.a and 6.9.1.13.b above).
- b. Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation (but see 6.9.1.13.b above).

Note: Routine surveillance testing, instrument calibration, or preventive maintenance that require configurations described in 6.9.1.14.a and 6.9.1.14.b above need not be reported except where test results themselves reveal a degraded mode as described above.

- c. Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems (but see 6.9.1.13.f above).
- d. Abnormal degradation of systems other than those specified in 6.9.1.13.c above designed to contain radioactive material resulting from the fission process.

Note: Sealed sources or calibration sources are not included under this item. Leakage of valve packing or gaskets within the limits for identified leakage set forth in Technical Specifications need not be reported under this item.

ADMINISTRATIVE CONTROLS

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification.

- a. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.5.1.
- b. Seismic event analysis, Specification 4.3.5.1.2.
- c. Reactor coolant specific activity analysis, Specification 3.4.5.
- d. Fire detection instrumentation, Specification 3.3.5.7.
- e. Fire suppression systems, Specifications 3.7.7.1, 3.7.7.2, 3.7.7.3, and 3.7.7.5.
- f. ECCS actuation, Specifications 3.5.3.1 and 3.5.3.2.
- g. Fire barrier penetration, Specification 3.7.8.
- h. Liquid Effluents Dose, Specification 3.11.1.2.
- i. Liquid Radwaste Treatment, Specification 3.11.1.3.
- j. Dose - Noble Gases, Specification 3.11.2.2.
- k. Dose - Iodine-131, Iodine-133, Tritium, and Radionuclides in Particulate Form, Specification 3.11.2.3.
- l. Gaseous Radwaste Treatment, Specification 3.11.2.4.
- m. Ventilation Exhaust Treatment, Specification 3.11.2.5.
- n. Total Dose, Specification 3.11.4.
- o. Monitoring Program, Specification 3.12.1.b.

6.10 RECORD RETENTION

Facility records shall be retained in accordance with ANSI-N45.2.9-1974.

6.10.1 The following records shall be retained for at least five years:

- a. Records and logs of facility operation covering time interval at each power level.
- b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

ADMINISTRATIVE CONTROLS

RECORDS RETENTION (Continued)

- c. All REPORTABLE OCCURRENCES submitted to the Commission.
- d. Records of surveillance activities, inspections, and calibrations required by these Technical Specifications.
- e. Records of changes made to Operating Procedures.
- f. Records of radioactive shipments.
- g. Records of sealed source and fission detector leak tests and results.
- h. Records of annual physical inventory of all sealed source material of record.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

- a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- c. Records of facility radiation and contamination surveys.
- d. Records of radiation exposure for all individuals entering radiation control areas.
- e. Records of gaseous and liquid radioactive material released to the environs.
- f. Records of transient or operational cycles for those facility components identified in Table 5.7.1-1.
- g. Records of reactor tests and experiments.
- h. Records of training and qualification for current members of the plant staff.
- i. Records of inservice inspections performed pursuant to these Technical Specifications.
- j. Records of Quality Assurance activities required by the QA Manual.
- k. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

RECORDS RETENTION (Continued)

- l. Records of the service lives of all hydraulic and mechanical snubbers listed in Table 3.7.5-1 including the data at which the service life commences and associated installation and maintenance records.
- m. Records of analyses required by the radiological environmental monitoring program.
- n. Records of (1) meetings of the PNSC, (2) meetings of the previous off-site review organization, the Company Nuclear Safety Committee (CNSC), (3) the independent reviews performed by the Corporate Nuclear Safety Section, and (4) the independent reviews performed by the Corporate Quality Assurance Audit Program, Performance Evaluation Unit.

6.11 RADIATION PROTECTION PROGRAM

6.11.1 Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "Control Device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP)*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

* Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

6.12.2 The requirements of 6.12.1 above shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Operations Shift Foreman on duty and/or the Radiation Control Supervisor.

6.13 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.13.1 The OFFSITE CALCULATION MANUAL (ODCM) shall be approved by the Commission prior to implementation.

6.13.2 Licensee initiated changes to the ODCM:

- a. Shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made effective. This submittal shall contain:
 1. Sufficiently detailed information to totally support rationale without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered and provided with an approval and date box, together with appropriate analyses or evaluations justifying the change(s);
 2. A determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and,
 3. Documentation of the fact that the change has been reviewed and found acceptable by the PNSC.
- b. Shall become effective upon review and acceptance by the PNSC.

6.14 PROCESS CONTROL PROGRAM (PCP)

6.14.1 The PROCESS CONTROL PROGRAM (PCP) shall be approved by the Commission prior to implementation.

6.14.2 Licensee initiated changes to the PCP:

- a. Shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:
 1. Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information;

ADMINISTRATIVE CONTROLS

PROCESS CONTROL PROGRAM (PCP) (Continued)

2. A determination that the change did not reduce the overall conformance of the solidification waste product to existing criteria for solid wastes; and
 3. Documentation of the fact that the change has been reviewed and found acceptable by the PNSC.
- b. Shall become effective upon review and acceptance by the PNSC.

6.15 MAJOR CHANGES TO LIQUID, GASEOUS, AND SOLID WASTE TREATMENT SYSTEMS^{7/}

6.15.1 Licensee initiated major changes to the radioactive waste systems (liquid, gaseous, and solid):

- a. Shall be reported to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the evaluation was reviewed by the PNSC. The discussion of each change shall contain:
 1. A summary of the evaluation that led to the determination that the change could be made in accordance with 10 CFR Part 50.59;
 2. Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information;
 3. A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems;
 4. An evaluation of the change that shows the predicted release of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the license application and amendments thereto;
 5. An evaluation of the change that shows the expected maximum exposure to an individual in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the license application and amendments thereto;
 6. A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;

^{7/} Licensees may choose to submit the information called for in this Specification as part of the annual FSAR update.

ADMINISTRATIVE CONTROLS

MAJOR CHANGES TO LIQUID, GASEOUS, AND SOLID WASTE TREATMENT SYSTEMS
(Continued)

7. An estimate of the exposure to plant operating personnel as a result of the change; and
 8. Documentation of the fact that the change was reviewed and found acceptable to the PNSC.
- b. Shall become effective upon review and acceptance by the PNSC.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

CAROLINA POWER & LIGHT COMPANY

DOCKET NO. 50-324

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 98
License No. DPR-62

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Carolina Power & Light Company (the licensee) dated July 28, 1981, as supplemented December 10, 1982, and December 29, 1983, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, Facility Operating License No. DPR-62 is hereby amended by deleting paragraphs 2.F and 2.G. The license is further amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C(2) is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 98, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Domenic B. Vassallo, Chief
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Division of Licensing

Attachment:
Changes to the
Technical Specifications

Date of Issuance: May 25, 1984

ATTACHMENT TO LICENSE AMENDMENT NO. 98

FACILITY OPERATING LICENSE NO. DPR-62

DOCKET NO 50-324

Revise the Appendix A Technical Specifications as follows:

Remove

Insert

XIV

XIV

XV

XV

XVI

XVI

6-1 Thru 6-26

6-1 Thru 6-33

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6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The General Manager - Brunswick Plant shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

OFFSITE

6.2.1 The offsite organization for facility management and technical support shall be as shown on Figure 6.2.1-1.

FACILITY STAFF

6.2.2 The facility organization shall be as shown on Figures 6.2.2-1 and 6.2.2-2 and:

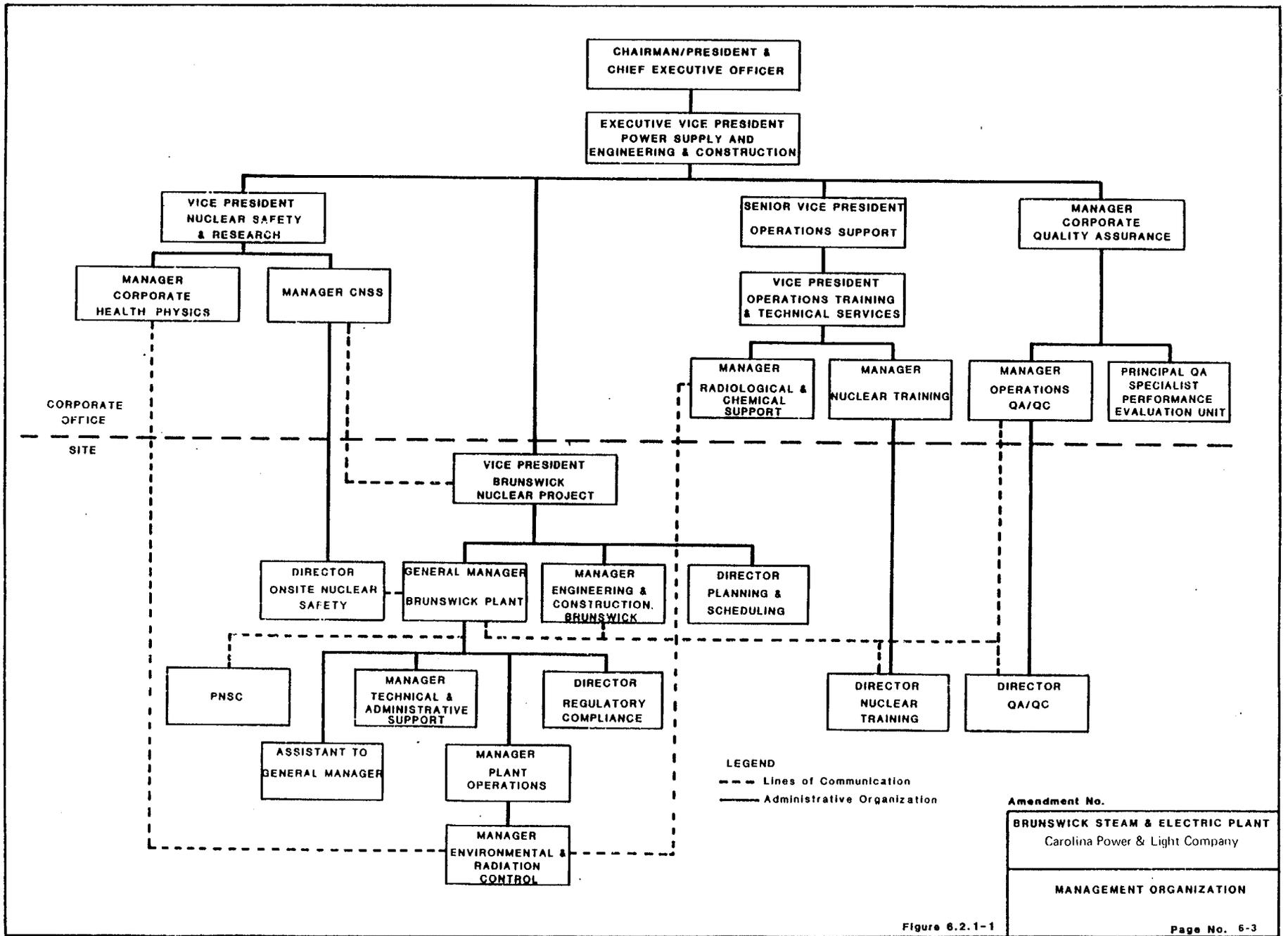
- a. Each facility on duty shift shall be composed of at least the minimum facility shift crew composition shown in Table 6.2.2-1.
- b. At least one licensed Reactor Operator shall be in the control room when fuel is in the reactor.
- c. When either reactor is in OPERATIONAL CONDITION 1, 2, or 3, at least one licensed Senior Reactor Operator shall be in the control room.
- d. An individual qualified to implement radiation protection procedures shall be onsite when fuel is in either reactor.*
- e. All CORE ALTERATIONS shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- f. A Fire Brigade of at least five members shall be maintained onsite at all times.* The Fire Brigade shall not include the minimum shift crew shown in Table 6.2.2-1 or any personnel required for other essential functions during a fire emergency.

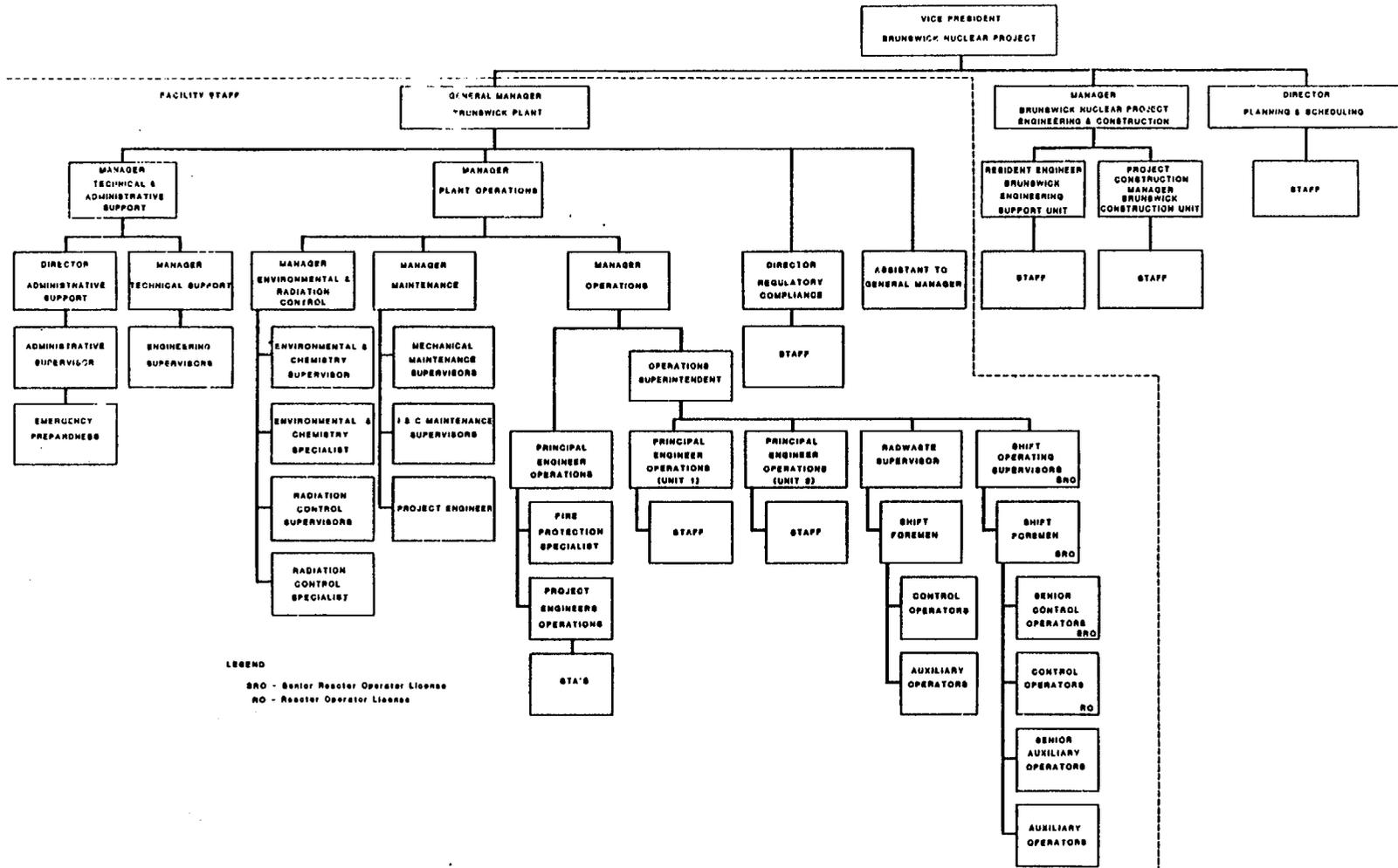
* The individual qualified to implement radiation protection procedures and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed two hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

ADMINISTRATIVE CONTROLS

FACILITY STAFF (Continued)

- g. Administrative procedures shall be developed and implemented to limit the working hours of facility staff who perform safety-related functions; e.g., senior reactor operators, reactor operators, health physicists, auxiliary operators, and key maintenance personnel. These procedures shall meet the working hour guidelines published by the Commission in Generic Letter No. 82-12.



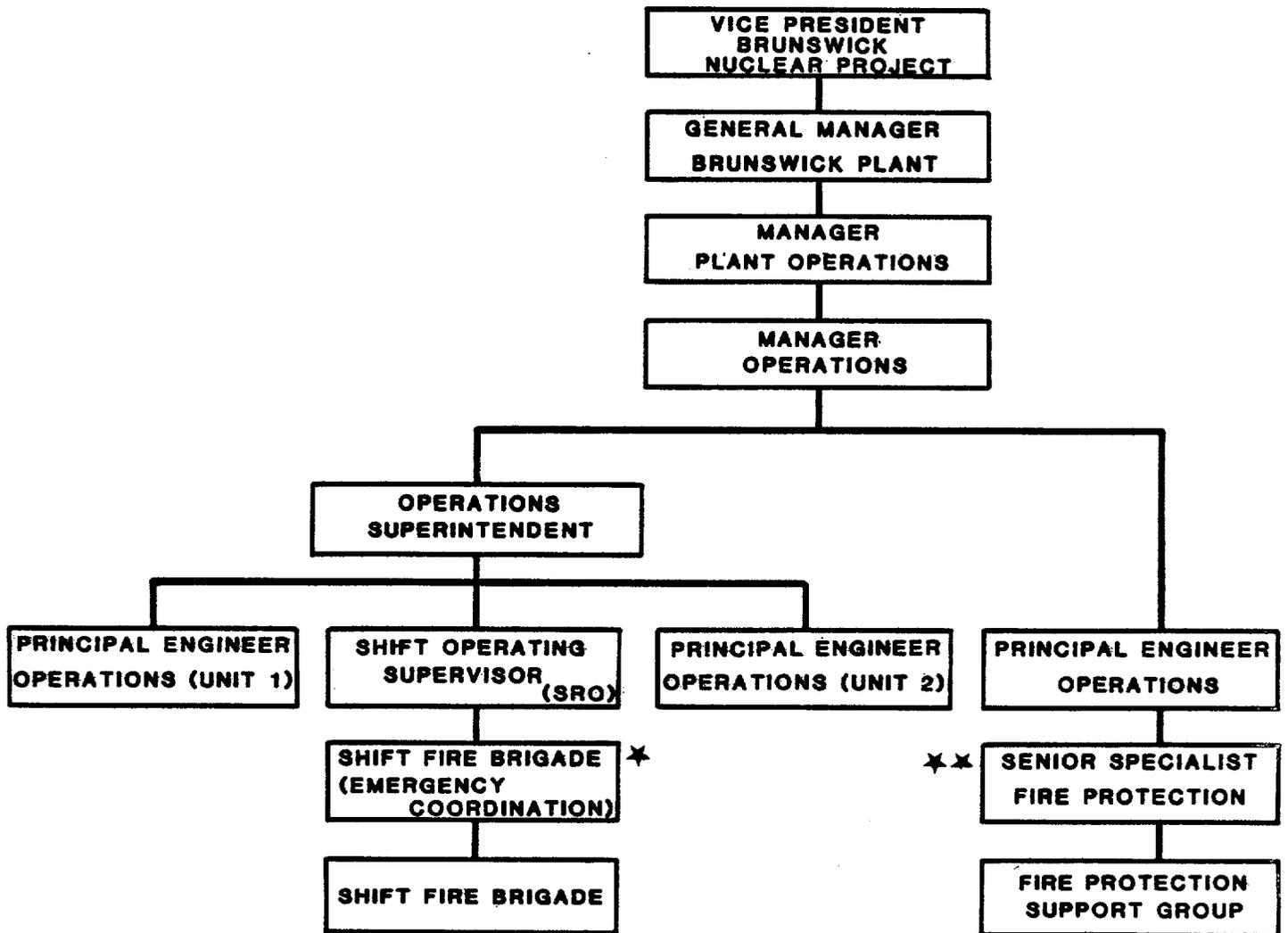


LEGEND
 SRO - Senior Reactor Operator License
 RO - Reactor Operator License

Amendment No.
BRUNSWICK STEAM & ELECTRIC PLANT
 Carolina Power & Light Company

FACILITY ORGANIZATION

Figure 6.2.2-1



LEGEND

★ Number of Brigade Fire Chiefs varies with Shift Organization

★★ One Specialist is Assigned The Duties of The Plant Fire Chief

Amendment No.

**BRUNSWICK STEAM &
ELECTRIC PLANT**

Carolina
Power & Light Company

PLANT FIRE PROTECTION ORGANIZATION

Figure 6.2.2-2

Page No. 6-5

TABLE 6.2.2-1
MINIMUM FACILITY SHIFT CREW COMPOSITION

WITH UNIT 1 IN CONDITION 1, 2, OR 3		
POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	CONDITIONS 1, 2, & 3	CONDITIONS 4 & 5
SOS	1	1 ^(b)
SRO ^(a)	1	1 ^(b)
RO ^(a)	3	3
AO	3	3
STA	1	1

WITH UNIT 1 IN CONDITION 4 OR 5		
POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	CONDITIONS 1, 2, & 3	CONDITIONS 4 & 5
SOS	1	1 ^(b)
SRO ^(a)	1	1 ^(b)
RO ^(a)	3	2
AO	3	3
STA	1	None

WITH UNIT 1 DE-FUELED		
POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	CONDITIONS 1, 2, & 3	CONDITIONS 4 & 5
SOS	1	1 ^(b)
SRO ^(a)	1	1 ^(b)
RO ^(a)	2	2
AO	3	3
STA	1	None

TABLE 6.2.2-1 (Continued)

MINIMUM FACILITY SHIFT CREW COMPOSITION

TABLE NOTATION

SOS - Shift Operating Supervisor with a Senior Reactor Operators License
SRO - Individual with a Senior Reactor Operators License
RO - Individual with a Reactor Operators License
AO - Auxiliary Operator (non-licensed individual)
STA - Shift Technical Advisor

- (a) Assumes each individual is licensed on both plants.
- (b) Does not include the licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising CORE ALTERATIONS.

The Shift Crew Composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2.2-1.

ADMINISTRATIVE CONTROLS

6.2.3 ONSITE NUCLEAR SAFETY (ONS)

FUNCTION

6.2.3.1 The ONS Unit shall function to examine facility operating characteristics, NRC issues, industry advisories, and other sources which may indicate areas for improving facility safety.

RESPONSIBILITIES

6.2.3.2 The ONS Unit shall be responsible for maintaining surveillance of facility activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

AUTHORITY

6.2.3.3 The ONS Unit shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving facility safety to the Manager-Corporate Nuclear Safety Section.

6.2.4 SHIFT TECHNICAL ADVISOR

6.2.4.1 The Shift Technical Advisor shall serve in an advisory capacity to the Shift Operating Supervisor on matters pertaining to the engineering aspects assuring safe operation of the unit.

6.3 FACILITY STAFF QUALIFICATION

6.3.1 Each member of the facility staff defined in Figure 6.2.2-1 shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the Manager - Environmental & Radiation Control who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975 and (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant during transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Director - Training and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55.

6.4.2 A training program for the Fire Brigade shall be maintained under the direction of the Manager-Operations and shall meet or exceed the requirements of Section 27 of the NFPA Code-1975.

* Not responsible for sign-off function.

ADMINISTRATIVE CONTROLS

6.5 REVIEW AND AUDIT

6.5.1 NUCLEAR SAFETY REVIEWERS

6.5.1.1 Individuals shall be designated/approved by the General Manager - Brunswick Plant for performing nuclear safety reviews.

6.5.1.2 Individuals designated under Specification 6.5.1.1 above shall have an academic degree in an engineering or related field or equivalent and two years related experience.

6.5.1.3 A list shall be maintained of individuals qualified to perform nuclear safety reviews, including additional individuals whose expertise may be necessary during the reviews to assure that the reviewers collectively possess the background and qualifications in the disciplines necessary and important to the specific review.

6.5.1.4 The list specified in Specification 6.5.1.3 above shall include the disciplines for which each individual is qualified.

6.5.1.5 For those cases where interdisciplinary reviews are required, as many individuals as necessary shall be used to perform the nuclear review function.

6.5.1.6 One of the two nuclear safety reviewers shall be an individual other than the original preparer or the individual approving the action.

6.5.2 SAFETY EVALUATIONS AND INDEPENDENT REVIEW CONTROL

SAFETY EVALUATIONS

6.5.2.1 A safety evaluation shall be prepared for each of the following:

- a. Changes to procedures required by Specification 6.8, or changes to other procedures that affect nuclear safety.
- b. Proposed tests or experiments that affect nuclear safety.
- c. Proposed modifications to plant systems or equipment that affect nuclear safety.
- d. Proposed changes to the Technical Specifications.
- e. Proposed changes to the Operating License.

6.5.2.2 Two nuclear safety reviews of the item and safety evaluation(s) prepared in accordance with Specification 6.5.2.1 above shall be performed prior to approval and implementation.

6.5.2.3 The item and associated safety evaluation(s) shall be examined in order to determine whether an interdisciplinary review is required in accordance with Specification 6.5.1.5 above.

ADMINISTRATIVE CONTROLS

PROCEDURES, TESTS, AND EXPERIMENTS

6.5.2.4 The safety evaluation prepared in accordance with Specifications 6.5.2.1.a and 6.5.2.1.b above shall include a written determination, with basis, of whether or not the procedures, proposed tests and experiments, and changes thereto constitute an unreviewed safety question as defined in 10 CFR 50.59, or whether they involve a change to the Technical Specifications.

6.5.2.5 Following the nuclear safety review, the procedures required by Specification 6.8, other procedures that affect nuclear safety, proposed tests or experiments, and changes thereto (other than editorial or typographical) which have been determined to not involve an unreviewed safety question as defined in 10 CFR 50.59 or change to the Technical Specifications shall be approved prior to implementation by the General Manager - Brunswick Plant or his previously designated alternate.

MODIFICATIONS

6.5.2.6 The safety evaluation prepared in accordance with Specification 6.5.2.1.c above shall include a written determination, with basis, of whether or not the proposed modification is a change in the facility as described in the safety analysis report, involves a change to the Technical Specifications, or constitutes an unreviewed safety question as defined in 10 CFR 50.59.

6.5.2.7 Following the nuclear safety review, proposed modifications which have been determined to not involve an unreviewed safety question as defined in 10 CFR 50.59 or a change to the Technical Specifications shall be approved by the General Manager - Brunswick Plant or his previously designated alternate.

OPERATING LICENSE/TECHNICAL SPECIFICATIONS

6.5.2.8 The safety evaluation prepared in accordance with Specifications 6.5.2.1.d and 6.5.2.1.e above shall include a written preliminary determination, with basis, of whether or not the proposed Operating License/Technical Specification change(s) is a change in the facility as described in the safety analysis report.

6.5.2.9 Following the nuclear safety review of the safety evaluation prepared in accordance with Specifications 6.5.2.1.d and 6.5.2.1.e above and the associated proposed action, the request shall be:

- a. Reviewed by the Plant Nuclear Safety Committee in accordance with Specification 6.5.3.8.
- b. Reviewed by the Corporate Nuclear Safety Section in accordance with Specification 6.5.4.9.

ADMINISTRATIVE CONTROLS

6.5.3 PLANT NUCLEAR SAFETY COMMITTEE (PNSC)

FUNCTION

6.5.3.1 As an effective means for the regular review, overview, evaluation, and maintenance of plant operational safety, a Plant Nuclear Safety Committee (PNSC) shall be established.

6.5.3.2 The PNSC shall function through the utilization of subcommittees, audits, investigations, reports, and/or performance of reviews as a group.

COMPOSITION

6.5.3.3 The PNSC shall be composed of the:

Chairman:	General Manager - Brunswick Plant*
Member:	Manager - Plant Operations
Member:	Manager - Technical & Administrative Support
Member:	Manager - Technical Support
Member:	Manager - Operations
Member:	Manager - Maintenance
Member:	Manager - Environmental & Radiation Control
Member:	Assistant to Plant General Manager
Member:	Director - QA/QC
Member:	Director - Regulatory Compliance
Member:	Director - Administrative Support

ALTERNATES

6.5.3.4 All alternate members shall be appointed in writing by the PNSC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as members at any one time.

6.5.3.5 All alternates, shall as a minimum, meet equivalent qualification criteria as specified for professional-technical personnel in Section 4.4 of ANSI N18.1-1971.

MEETING FREQUENCY

6.5.3.6 The PNSC shall meet at least once per calendar month and as convened by the PNSC Chairman or his designated alternate.

QUORUM

6.5.3.7 The minimum quorum of the PNSC necessary for the performance of the PNSC activities of the Technical Specifications shall consist of the PNSC Chairman or his designated alternate and five members including alternates. No more than two alternates shall be counted toward meeting the minimum quorum requirement.

* Or designated alternate.

ADMINISTRATIVE CONTROLS

ACTIVITIES

6.5.3.8 The PNSC activities shall include the following:

- a. Review of all procedures required by Specification 6.8 and changes thereto (and any other procedures and changes thereto), any of which constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- b. Review of all proposed tests or experiments that constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- c. Review of all proposed modifications that constitute an unreviewed safety question or involve a change to the Technical Specifications, prior to implementation.
- d. Review of all proposed changes to the Technical Specifications or Operating License, prior to implementation.
- e. Review of reports on violations of Technical Specifications including reports covering evaluation and recommendations to prevent recurrence to the Vice President - Brunswick Nuclear Project and to the Manager - Corporate Nuclear Safety Section.
- f. Performance of special reviews, investigations (or analyses), and reports thereon as requested by the Manager - Corporate Nuclear Safety Section.
- g. Review of events requiring 24 hours written notification to the Commission.
- h. Review of facility operations to detect potential nuclear safety hazards.
- i. Annual review of the Security Plan.
- j. Annual review of the Emergency Plan.
- k. Review of accidental, unplanned, or uncontrolled radioactive release including the preparation of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence and the forwarding of these reports to the Vice President - Brunswick Nuclear Project and the Manager - Corporate Nuclear Safety Section.
- l. Review of changes to the PROCESS CONTROL PROGRAM and the OFFSITE DOSE CALCULATION MANUAL.

ADMINISTRATIVE CONTROLS

AUTHORITY

6.5.3.9 If there is a disagreement between recommendations of a majority of the PNSC and the actions contemplated by the General Manager - Brunswick Plant, the PNSC shall provide written notification within 24 hours to the Vice President - Brunswick Nuclear Project and the Vice President - Corporate Nuclear Safety and Research. The course determined by the General Manager - Brunswick Plant to be the most conservative shall be followed.

RECORDS

6.5.3.10 The PNSC shall maintain written minutes of each PNSC meeting that, at a minimum, document the results of all PNSC activities performed under the provisions of these Technical Specifications. Copies shall be provided to the Vice President - Brunswick Nuclear Project and the Manager - Corporate Nuclear Safety Section.

6.5.4 CORPORATE NUCLEAR SAFETY SECTION

FUNCTION

6.5.4.1 The Corporate Nuclear Safety Section (CNSS) of the Corporate Nuclear Safety & Research Department shall function to provide independent review of significant plant changes, tests, and procedures; verify that REPORTABLE OCCURRENCES are investigated in a timely manner and corrected in a manner that reduces the probability of recurrence of such events; and detect trends that may not be apparent to a day-to-day observer.

ORGANIZATION

6.5.4.2 The individuals assigned responsibility for independent reviews shall be specified in technical disciplines. These individuals shall collectively have the experience and competence required to review activities in the following areas:

- a. nuclear power plant operations
- b. nuclear engineering
- c. chemistry and radiochemistry
- d. metallurgy
- e. non-destructive testing
- f. instrumentation and control
- g. radiological safety
- h. mechanical and electrical engineering
- i. administrative controls

ADMINISTRATIVE CONTROLS

ORGANIZATION (Continued)

- j. seismic and environmental
- k. quality assurance practices
- l. Other appropriate fields associated with the unique characteristics of the nuclear power plant.

6.5.4.3 The Manager - Corporate Nuclear Safety Section shall have an academic degree in an engineering or related field and, in addition, shall have a minimum of ten years related experience, of which a minimum of five years shall be in the operation and/or design of nuclear power plants.

6.5.4.4 The independent safety review program reviewers shall have an academic degree in an engineering or related field or equivalent and, in addition, shall have a minimum of five years related experience.

6.5.4.5 An individual may possess competence in more than one specialty area. If sufficient expertise is not available within the Corporate Nuclear Safety Section, competent individuals from other Carolina Power & Light Company organizations or outside consultants shall be utilized in performing independent reviews and investigations.

6.5.4.6 At least three individuals, qualified as discussed in 6.5.4.4 above shall review each item submitted under the requirements of Section 6.5.4.9.

6.5.4.7 Independent safety reviews shall be performed by individuals not directly involved with the activity under review or responsible for the activity under review.

6.5.4.8 The Corporate Nuclear Safety Section independent safety review program shall be conducted in accordance with written, approved procedures.

REVIEW

6.5.4.9 The Corporate Nuclear Safety Section shall perform reviews of the following:

- a. The safety evaluations for 1) changes to procedures required by Specification 6.8, 2) modifications of equipment or systems, and 3) tests or experiments that constitute a change to the safety analysis report to verify that such actions did not constitute an unreviewed safety question or involve a change to the Technical Specifications. Implementation may proceed prior to completion of this review.
- b. Proposed changes to procedures required by Specification 6.8, and proposed modifications that constitute an unreviewed safety question as defined in 10 CFR 50.59 or a change to the Technical Specifications, prior to implementation.

ADMINISTRATIVE CONTROLS

REVIEW (Continued)

- c. Proposed tests or experiments that involve an unreviewed safety question as defined in 10 CFR 50.59 or a change to the Technical Specifications, prior to implementation.
- d. Proposed changes to the Technical Specifications and Operating License.
- e. Violations, deviations, and events requiring 24 hour written notification to the Commission, such as:
 - 1. Violations of applicable codes, regulations, orders, Technical Specifications, license requirements, and internal procedures or instructions having nuclear safety significance.
 - 2. Significant operating abnormalities or deviations from normal and expected performance of plant safety-related structures, systems, or components.
- f. Reports and minutes of the PNSC.
- g. Any other matter involving safe operation of the nuclear power plant that the Manager - Corporate Nuclear Safety Section deems appropriate for consideration or which is referred to the Manager - Corporate Nuclear Safety Section by the on-site operating organization or other functional organizational units within Carolina Power & Light Company.

6.5.4.10 Review of items considered under 6.5.4.9(e) through (g) above shall include the results of any investigations made and the recommendations resulting from these investigations to prevent or reduce the probability of recurrence of the event.

RECORDS

6.5.4.11 Records of Corporate Nuclear Safety Section reviews, including recommendations and concerns, shall be prepared and distributed as indicated below:

- a. Copies of documented reviews shall be retained in the CNSS files.
- b. Recommendations and concerns shall be submitted to the General Manager - Brunswick Nuclear Project and Vice President - Brunswick Plant, within 14 days of completion of the review.
- c. A summation of Corporate Nuclear Safety recommendations and concerns shall be submitted to the Chairman/President and Chief Executive Officer; Executive Vice President - Power Supply and Engineering and Construction; Vice President - Corporate Nuclear Safety and Research; Vice President - Brunswick Nuclear Project; General Manager - Brunswick Plant; and others, appropriate, on at least a bi-monthly frequency.

ADMINISTRATIVE CONTROLS

6.5.5 CORPORATE QUALITY ASSURANCE AUDIT PROGRAM

FUNCTION

6.5.5.1 The Performance Evaluation Unit (PEU) of the Corporate Quality Assurance Department shall function to perform audits of facility activities specified in Specification 6.5.5.2.

AUDITS

6.5.5.2 Audits of facility activities shall be performed by the PEU. These audits shall encompass:

- a. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.
- b. The training and qualifications of the entire facility staff at least once per 12 months.
- c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems, or methods of operation that affect nuclear safety at least once per 6 months.
- d. The verification of compliance and implementation of the requirements of the Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.
- e. The Emergency Plan and implementing procedures at least once per 12 months.
- f. The Security Plan and implementing procedures at least once per 12 months.
- g. The Facility Fire Protection Program and implementing procedures at least once per 12 months.
- h. The radiological environmental monitoring program and the results thereof at least once per 12 months.
- i. The OFFSITE DOSE CALCULATIONAL MANUAL and implementing procedures at least once per 24 months.
- j. The PROCESS CONTROL PROGRAM and implementing procedures for processing and packaging of radioactive wastes at least once per 24 months.

ADMINISTRATIVE CONTROLS

AUDITS (Continued)

- k. The performance of activities required by the Quality Assurance 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.
- l. Any other area of facility operation considered appropriate by the Manager - Quality Assurance Services Section.

6.5.5.3 Personnel performing the quality assurance audits shall have access to the plant operating records.

RECORDS

6.5.5.4 Records of audits shall be prepared and retained.

6.5.5.5 Audit reports encompassed by 6.5.5.2 above shall be prepared, approved by the Principal QA Specialist - Performance Evaluation Unit, and forwarded to the Executive Vice President - Power Supply and Engineering and Construction; Vice President - Brunswick Nuclear Project; Vice President - Corporate Nuclear Safety and Research; General Manager - Brunswick Plant; and others, as appropriate, within 30 days after completion of the audit.

AUTHORITY

6.5.5.6 The Manager - Quality Assurance Services Section under the Manager - Corporate Quality Assurance shall be responsible for the following:

- a. The administering of the Corporate Quality Assurance Audit Program.
- b. The approval of the individual(s) selected to conduct quality assurance audits.

PERSONNEL

6.5.5.7 Audit personnel shall be independent of the area audited.

6.5.5.8 Selection of personnel for auditing assignments shall be based on experience or training that establishes that their qualifications are commensurate with the complexity or special nature of the activities to be audited. In selecting audit personnel, consideration shall be given to special abilities, specialized technical training, prior pertinent experience, personal characteristics, and education.

6.5.5.9 Qualified outside consultants or other individuals independent from those personnel directly involved in plant operation shall be used to augment the audit teams when necessary.

ADMINISTRATIVE CONTROLS

6.5.6 OUTSIDE AGENCY INSPECTION AND AUDIT PROGRAM

6.5.6.1 An independent fire protection and loss prevention inspection and audit shall be performed at least once per 12 months utilizing either qualified offsite licensee personnel or an outside fire protection firm.

6.5.6.2 An inspection and audit of the fire protection and loss prevention program shall be performed by an outside qualified fire consultant at intervals no greater than 36 months.

6.6 REPORTABLE OCCURRENCE ACTION

6.6.1 The following actions shall be taken for REPORTABLE OCCURRENCES:

- a. The Commission shall be notified and/or a report submitted pursuant to the requirements of Specification 6.9.
- b. Each REPORTABLE OCCURRENCE requiring 24 hour notification to the Commission shall be reviewed by the General Manager - Brunswick Plant and submitted to the Manager - Corporate Nuclear Safety Section and the Vice President - Brunswick Nuclear Project.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

- a. The facility shall be placed in at least HOT SHUTDOWN within two hours.
- b. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within one hour. The Vice President - Brunswick Nuclear Project and the Manager - Corporate Nuclear Safety Section shall be notified within 24 hours.
- c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the General Manager - Brunswick Plant. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems, or structures, and (3) corrective action taken to prevent recurrence.
- d. The Safety Limit Violation Report shall be submitted to the Commission, the Vice President - Brunswick Nuclear Project, and the Manager - Corporate Nuclear Safety Section within 14 days of the violation.

ADMINISTRATIVE CONTROLS

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, November 1972.
- b. Refueling operations.
- c. Surveillance and test activities of safety related equipment.
- d. Security Plan implementation.
- e. Emergency Plan implementation.
- f. Fire Protection Program implementation.
- g. OFFSITE DOSE CALCULATION MANUAL implementation.
- h. PROCESS CONTROL PROGRAM implementation.
- i. Quality Assurance Program for effluent and environmental monitoring using the guidance in Regulatory Guide 1.21, Revision 1, June 1974, and Regulatory Guide 4.1, Revision 1, April 1975.

6.8.2 Temporary changes to procedures of Specification 6.8.1 above, any other procedures that affect nuclear safety, and proposed tests or experiments may be made provided:

- a. The intent of the original procedure, proposed test or experiment is not altered.
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator License on the unit affected.
- c. The change is documented, reviewed pursuant to Specifications 6.5.2.1 and 6.5.2.2 and approved by the General Manager - Brunswick Plant or his previously designated alternate within 14 days of implementation.

6.8.3 The following programs shall be established, implemented, and maintained:

- a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The program shall include the following:

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS (Continued)

1. Preventive maintenance and periodic visual inspection requirements, and
2. Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel,
2. Procedures for monitoring, and
3. Provisions for maintenance of sampling and analysis equipment.

c. Post-Accident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

1. Training of personnel,
2. Procedures for sampling and analysis, and
3. Provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the Regional Office unless otherwise noted.

STARTUP REPORTS

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

ADMINISTRATIVE CONTROLS

STARTUP REPORTS (Continued)

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events, i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation, supplementary reports shall be submitted at least every three months until all three events have been completed.

ANNUAL REPORTS^{1/}

6.9.1.4 Annual reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

PERSONNEL EXPOSURE AND MONITORING REPORT^{2/}

6.9.1.5 Reports required on an annual basis shall include a tabulation of the number of station, utility, and other personnel, including contractors, receiving exposures greater than 100 mrem/yr and their associated man-rem exposure according to work and job functions^{2/}, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignments to various duty functions may be estimated, based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20 percent of the individual total dose need not be accounted for. In the aggregate, at least 80 percent of the total whole body dose received from external sources shall be assigned to specific major work functions.

1/ A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

2/ This tabulation supplements the requirements of §20.407 of 10 CFR Part 20.

ADMINISTRATIVE CONTROLS

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT^{3/}

6.9.1.6 Routine radiological environmental operating reports covering the operation of the facility during the previous calendar year shall be submitted prior to May 1 of each year.

6.9.1.7 The Annual Radiological Environmental Operating Report shall include the following:

- a. Summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with pre-operational studies, with operational controls (as appropriate), and with previous environmental surveillance reports, and an assessment of the observed impact of the plant operation on the environment.
- b. Results of land uses censuses required by Specification 3.12.2.
- c. Results of analysis of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the OFFSITE DOSE CALCULATION MANUAL, as well as summarized and tabulated results of these analyses and measurements in the format of Table 3 in the Radiological Assessment Branch Technical Position, Revision 1, November 1979. In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data should be submitted as soon as possible in a supplementary report.
- d. A summary description of the radiological environmental monitoring program.
- e. At least two legible maps^{4/} covering all sampling locations keyed to a table giving distances and directions from the centerline of one reactor.
- f. The results of licensee participation in the Interlaboratory Comparison Program, required by Specification 3.12.3.

^{3/} A single submittal may be made for a multiple unit station.

^{4/} One map shall cover stations near the SITE BOUNDARY; a second map shall include the more distant stations.

ADMINISTRATIVE CONTROLS

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT (Continued)

- g. Discussion of all deviations from the sampling schedule of Table 3.12.1-1.
- h. Discussion of all analyses in which the LLD required by Table 4.12.1-1 was not achievable.

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT^{5/}

6.9.1.8 Routine radioactive effluent release reports covering the operation of the facility during the previous 6 months of operation shall be submitted within the time periods specified in Specifications 6.9.1.9 and 6.9.1.10 below.

6.9.1.9 The portion of the Semiannual Radioactive Effluent Release Reports to be submitted within 60 days after January 1 and July 1 of each year shall include the following:

- a. A summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the facility as outlined in Regulatory Guide 1.21, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactivity Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," Revision 1, June 1974, with data summarized on a quarterly basis similar to the format of Appendix B thereof.
- b. The information specified below for each class of solid waste (as defined by 10 CFR Part 61, when implemented) shipped offsite during the report period:
 - 1. Container volume,
 - 2. Total curie quantity (specify whether determined by measurement or estimate),
 - 3. Principal radionuclides (specify whether determined by measurement or estimate),
 - 4. Source of waste and processing employed (e.g., dewatered spent resin, compacted dry waste, evaporator bottoms),
 - 5. Type of container (e.g., LSA, Type A, Type B, Large Quantity), and

^{5/} A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

ADMINISTRATIVE CONTROLS

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT (Continued)

6. Solidification agent or absorbent (e.g., cement, urea formaldehyde).
- c. A list of description of unplanned releases from the site to UNRESTRICTED AREAS of radioactive materials in gaseous and liquid effluents made during the reporting period.
- d. Any changes made during the reporting period to the PROCESS CONTROL PROGRAM (PCP) or the OFFSITE DOSE CALCULATION MANUAL (ODCM), as well as a listing of new locations for dose calculations and/or environmental monitoring identified by the land use census pursuant to Specification 3.12.2.

6.9.1.10 The portion of the Semiannual Radioactive Effluent Release Report to be submitted within 90 days after January 1 of each year shall include the following:

- a. An annual summary of hourly meteorological data collected over the previous calendar year. This annual summary may be either in the form of an hour-by-hour listing on magnetic tape of wind speed, wind direction, atmospheric stability, and precipitation (if measured), or in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability.^{6/}
- b. An assessment of the radiation doses due to the radioactive liquid and gaseous effluents released from the station during the previous calendar year.

MONTHLY OPERATING REPORTS

6.9.1.11 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to main steam system safety/relief valves, shall be submitted on a monthly basis to the Director, Office of Resource Management, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Administrator of the Regional Office no later than the 15th of each month following the calendar month covered by the report.

^{6/} In lieu of submission with the Semiannual Radioactive Effluent Release Report, the licensee has the option of retaining this summary of required meteorological data in a file that shall be provided to the NRC upon request.

ADMINISTRATIVE CONTROLS

REPORTABLE OCCURRENCES

6.9.1.12 The REPORTABLE OCCURRENCES of Specifications 6.9.1.13 and 6.9.1.14 below, including corrective actions and measures to prevent recurrence, shall be reported to the NRC. Supplemental reports may be required to fully describe final resolution of occurrence. In case of corrected or supplemental reports, a licensee event report shall be completed and reference shall be made to the original report date.

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP

6.9.1.13 The types of events listed below shall be reported within 24 hours by telephone and confirmed by telegraph, mailgram, or facsimile transmission to the Regional Administrator of the Regional Office, or his designate no later than the first working day following the event, with a written followup report within 14 days. The written followup report shall include, as a minimum, a completed copy of the licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. Failure of the reactor protection system or other systems subject to limiting safety system settings to initiate the required protective function by the time a monitored parameter reaches the setpoint specified as the limiting safety system setting in the Technical Specifications or failure to complete the required protective function.

Note: Instrument drift discovered as a result of testing need not be reported under this item (but see 6.9.1.13.e, 6.9.1.13.f, and 6.9.1.14.a below).

- b. Operation of the unit or affected systems when any parameter or operation subject to a limiting condition for operation is less conservative than the least conservative aspect of the limiting condition for operation established in the Technical Specifications.

Note: If specified action is taken when a system is found to be operating between the most conservative and least conservative aspects of a limiting condition for operation listed in the Technical Specifications, the limiting condition for operation is not considered to have been violated and no report need be submitted under this section (but see 6.9.1.14.b below).

ADMINISTRATIVE CONTROLS

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP (Continued)

- c. Abnormal degradation discovered in fuel cladding, reactor coolant pressure boundary, or primary containment.

Note: Leakage of valve packing or gaskets within the limits for identified leakage set forth in Technical Specifications need not be reported under this section.

- d. Reactivity anomalies involving disagreement with predicted value of reactivity balance under steady-state conditions during power operation greater than or equal to 1% $\Delta k/k$; a calculated reactivity balance indicating a SHUTDOWN MARGIN less conservative than specified in the Technical Specifications; short-term reactivity increases that correspond to a reactor period of less than 5 seconds or, if subcritical, an unplanned reactivity insertion of more than 0.5% $\Delta k/k$; or occurrence of any unplanned criticality.
- e. Failure or malfunction of one or more components that prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR.
- f. Personnel error or procedural inadequacy which prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR.

Note: For 6.9.1.13.e and 6.9.1.13.f, reduced redundancy that does not result in loss of system function need not be reported under this section (but see 6.9.1.14.b and 6.9.1.14.c below).

- g. Conditions arising from natural or man-made events that, as a direct result of the event, require plant shutdown, operation of safety systems, or other protective measures required by Technical Specifications.
- h. Errors discovered in the transient or accident analyses or in the methods used for such analyses as described in the safety-analysis report or in the bases for the Technical Specifications that have or could have permitted reactor operation in a manner less conservative than assumed in the analyses.
- i. Performance of structures, systems, or components that requires remedial action or corrective measures to prevent operation in a manner less conservative than assumed in the accident analyses in the safety analysis report or Technical Specifications bases; or discovery

ADMINISTRATIVE CONTROLS

PROMPT NOTIFICATION WITH WRITTEN FOLLOWUP (Continued)

during plant life of conditions not specifically considered in the safety analysis report or Technical Specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

Note: This item is intended to provide for reporting of potentially generic problems.

- j. Failure or malfunction of the main steam system safety/relief valves.

THIRTY DAY WRITTEN REPORTS

6.9.1.14 The types of events listed below shall be the subject of written reports to the Regional Administrator of the Regional Office within thirty days of occurrence of the event. The written report shall include, as a minimum, a completed copy of the licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the Technical Specifications but which do not prevent the fulfillment of the functional requirements of affected systems (but see 6.9.1.13.a and 6.9.1.13.b above).
- b. Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation (but see 6.9.1.13.b above).

Note: Routine surveillance testing, instrument calibration, or preventive maintenance that require configurations described in 6.9.1.14.a and 6.9.1.14.b above need not be reported except where test results themselves reveal a degraded mode as described above.

- c. Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems (but see 6.9.1.13.f above).
- d. Abnormal degradation of systems other than those specified in 6.9.1.13.c above designed to contain radioactive material resulting from the fission process.

Note: Sealed sources or calibration sources are not included under this item. Leakage of valve packing or gaskets within the limits for identified leakage set forth in Technical Specifications need not be reported under this item.

ADMINISTRATIVE CONTROLS

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Regional Administrator of the Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification.

- a. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.5.1.
- b. Seismic event analysis, Specification 4.3.5.1.2.
- c. Reactor coolant specific activity analysis, Specification 3.4.5.
- d. Fire detection instrumentation, Specification 3.3.5.7.
- e. Fire suppression systems, Specifications 3.7.7.1, 3.7.7.2, 3.7.7.3, and 3.7.7.5.
- f. ECCS actuation, Specifications 3.5.3.1 and 3.5.3.2.
- g. Fire barrier penetration, Specification 3.7.8.
- h. Liquid Effluents Dose, Specification 3.11.1.2.
- i. Liquid Radwaste Treatment, Specification 3.11.1.3.
- j. Dose - Noble Gases, Specification 3.11.2.2.
- k. Dose - Iodine-131, Iodine-133, Tritium, and Radionuclides in Particulate Form, Specification 3.11.2.3.
- l. Gaseous Radwaste Treatment, Specification 3.11.2.4.
- m. Ventilation Exhaust Treatment, Specification 3.11.2.5.
- n. Total Dose, Specification 3.11.4.
- o. Monitoring Program, Specification 3.12.1.b.

6.10 RECORD RETENTION

Facility records shall be retained in accordance with ANSI-N45.2.9-1974.

6.10.1 The following records shall be retained for at least five years:

- a. Records and logs of facility operation covering time interval at each power level.
- b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

ADMINISTRATIVE CONTROLS

RECORDS RETENTION (Continued)

- c. All REPORTABLE OCCURRENCES submitted to the Commission.
- d. Records of surveillance activities, inspections, and calibrations required by these Technical Specifications.
- e. Records of changes made to Operating Procedures.
- f. Records of radioactive shipments.
- g. Records of sealed source and fission detector leak tests and results.
- h. Records of annual physical inventory of all sealed source material of record.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

- a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
- b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.
- c. Records of facility radiation and contamination surveys.
- d. Records of radiation exposure for all individuals entering radiation control areas.
- e. Records of gaseous and liquid radioactive material released to the environs.
- f. Records of transient or operational cycles for those facility components identified in Table 5.7.1-1.
- g. Records of reactor tests and experiments.
- h. Records of training and qualification for current members of the plant staff.
- i. Records of inservice inspections performed pursuant to these Technical Specifications.
- j. Records of Quality Assurance activities required by the QA Manual.
- k. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

RECORDS RETENTION (Continued)

- l. Records of the service lives of all hydraulic and mechanical snubbers listed in Table 3.7.5-1 including the data at which the service life commences and associated installation and maintenance records.
- m. Records of analyses required by the radiological environmental monitoring program.
- n. Records of (1) meetings of the PNSC, (2) meetings of the previous off-site review organization, the Company Nuclear Safety Committee (CNSC), (3) the independent reviews performed by the Corporate Nuclear Safety Section, and (4) the independent reviews performed by the Corporate Quality Assurance Audit Program, Performance Evaluation Unit.

6.11 RADIATION PROTECTION PROGRAM

6.11.1 Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "Control Device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each high radiation area in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP)*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

* Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

ADMINISTRATIVE CONTROLS

HIGH RADIATION AREA (Continued)

6.12.2 The requirements of 6.12.1 above shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Operations Shift Foreman on duty and/or the Radiation Control Supervisor.

6.13 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.13.1 The OFFSITE CALCULATION MANUAL (ODCM) shall be approved by the Commission prior to implementation.

6.13.2 Licensee initiated changes to the ODCM:

- a. Shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made effective. This submittal shall contain:
 1. Sufficiently detailed information to totally support rationale without benefit of additional or supplemental information. Information submitted should consist of a package of those pages of the ODCM to be changed with each page numbered and provided with an approval and date box, together with appropriate analyses or evaluations justifying the change(s);
 2. A determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and,
 3. Documentation of the fact that the change has been reviewed and found acceptable by the PNSC.
- b. Shall become effective upon review and acceptance by the PNSC.

6.14 PROCESS CONTROL PROGRAM (PCP)

6.14.1 The PROCESS CONTROL PROGRAM (PCP) shall be approved by the Commission prior to implementation.

6.14.2 Licensee initiated changes to the PCP:

- a. Shall be submitted to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:
 1. Sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information;

ADMINISTRATIVE CONTROLS

PROCESS CONTROL PROGRAM (PCP) (Continued)

2. A determination that the change did not reduce the overall conformance of the solidification waste product to existing criteria for solid wastes; and
3. Documentation of the fact that the change has been reviewed and found acceptable by the PNSC.

b. Shall become effective upon review and acceptance by the PNSC.

6.15 MAJOR CHANGES TO LIQUID, GASEOUS, AND SOLID WASTE TREATMENT SYSTEMS^{7/}

6.15.1 Licensee initiated major changes to the radioactive waste systems (liquid, gaseous, and solid):

- a. Shall be reported to the Commission in the Semiannual Radioactive Effluent Release Report for the period in which the evaluation was reviewed by the PNSC. The discussion of each change shall contain:
 1. A summary of the evaluation that led to the determination that the change could be made in accordance with 10 CFR Part 50.59;
 2. Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information;
 3. A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems;
 4. An evaluation of the change that shows the predicted release of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the license application and amendments thereto;
 5. An evaluation of the change that shows the expected maximum exposure to an individual in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the license application and amendments thereto;
 6. A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;

^{7/} Licensees may choose to submit the information called for in this Specification as part of the annual FSAR update.

ADMINISTRATIVE CONTROLS

MAJOR CHANGES TO LIQUID, GASEOUS, AND SOLID WASTE TREATMENT SYSTEMS

(Continued)

7. An estimate of the exposure to plant operating personnel as a result of the change; and
 8. Documentation of the fact that the change was reviewed and found acceptable to the PNSC.
- b. Shall become effective upon review and acceptance by the PNSC.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 70 TO FACILITY LICENSE NO. DPR-71 AND
AMENDMENT NO. 98 TO FACILITY LICENSE NO. DPR-62
CAROLINA POWER & LIGHT COMPANY
BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
DOCKET NOS. 50-325 AND 50-324

1.0 Introduction

By letters dated July 28, 1981 and December 10, 1982 the Carolina Power & Light Company (CP&L/licensee) requested changes to its facility licenses and to the Technical Specifications regarding its management organization structure and reporting requirements. Section 6, Administrative Controls, of the Technical Specifications contain information and descriptions of the licensee's management organization. The licensee proposed to modify these specifications in the following manner to reflect current licensee organization and establish additional reporting requirements:

- (1) Inclusion of corporate and plant organization changes: The scope of activities of the Plant Nuclear Safety Committee (PNSC) as previously described in the Technical Specifications will continue to be performed. The proposed changes will provide for a more defined program of review and management overview of the facility operation.
- (2) The reporting requirements of Section 6.9.1.8 and 6.9.1.9 have been revised to include the guidance information contained in Regulatory Guide 1.16.
- (3) Inclusion of additional NRC (NUREG-0737) guidance concerning minimum shift crew composition.
- (4) Additional requirements for reporting safety/relief valve challenges.
- (5) Reformatting to be consistent with the format of the GE/BWR-4 Standard Technical Specifications.

The staff reviewed the requested changes and by letter dated April 21, 1983 the staff requested additional information. CP&L responded by letter dated December 29, 1983, updating the information in its previous requests and adding the following changes:

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1. Requirements per NUREG-0737 Item II.B.3 for establishing, implementing, and maintaining an administrative program concerning post-accident sampling. Technical Specifications for this item were requested by the NRC in Generic Letter No. 83-36 dated November 1, 1983.
2. Requirements per NUREG-0737 Item I.A.1.3 concerning the limitation of nuclear power plant staff overtime. Technical Specifications for this item were requested by the NRC in Generic Letter No. 83-02 dated January 10, 1983.
3. Administrative Controls requirements necessary to support the technical requirements of the Radiological Effluent Technical Specifications (RETS). These RETS Administrative Controls requirements were submitted in the CP&L letter dated November 11, 1983.
4. The inclusion of Operating License paragraphs 2.I and 2.J for Brunswick-1 and Operating License paragraphs 2.F and 2.G for Brunswick-2 in the Technical Specifications. Inclusion of these requirements in the Technical Specifications and deletion of the above referenced paragraphs from the Operating Licenses provides consistency with the GE/BWR-4 Standard Technical Specifications.

The staff issued its notice of the proposed license amendment in the Federal Register on October 26, 1983, prior to receiving CP&L's revised request of December 29, 1983. In that notice the staff proposed a determination of no significant hazards consideration. The additional changes subsequently proposed are consistent with that notice because they are either additional limitations not presently included in the Technical Specifications or are purely administrative. Therefore, the staff's previously proposed determination of no significant hazards consideration remains valid.

2.0 Evaluation

We have reviewed the licensee's proposed changes relating to revisions to the corporate organization, the plant organization, the Plant Nuclear Safety Committee, and numerous administrative and editorial changes. The significant changes are the following:

(1) Section 6.2.2

A statement has been added that "when either reactor is in Operational Condition 1,2 or 3, at least one licensed Senior Reactor Operator shall be in the control room."

Subsections d. and f. have been asterisked to note that, "The individual qualified to implement radiation protection procedures and Fire Brigade composition may be less than the minimum requirements for a period of time not to exceed two hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions."

A new subsection g. has been added that requires administrative procedures to limit the working hours of the facility staff who perform safety related functions, in accordance with guidelines, published by the Commission in Generic Letter 82-12

(2) Figure 6.2.1-1

The corporate organization has been revised under the Executive Vice President, Power Supply and Engineering and Construction. Reporting to this Executive Vice President are the Vice President Nuclear Safety and Research, Vice President Brunswick Nuclear Project (a new position), and the Manager Corporate Quality Assurance (a new position; the function formerly reported to the Vice President Nuclear Safety and Research). The Vice President Brunswick Nuclear Project is assigned to the site. Reporting to the Vice President Brunswick Nuclear Project is the General Manager Brunswick Plant (responsible for the facility staff), Manager Brunswick Nuclear Project Engineering and Construction, and the Director Planning and Scheduling. This new organization is shown in Figure 6.2.1-1.

(3) Figure 6.2.2-1

The facility organization has been revised under the General Manager Brunswick Plant. Reporting to the General Manager Brunswick Plant are the Manager Technical and Administrative Support, Manager Plant Operations, Director Regulatory Compliance, and an Assistant to General Manager. The Manager Technical and Administrative Support is responsible for plant technical and administrative support. The Manager Plant Operations is responsible for environmental and radiation control, plant maintenance, and plant operations. The Director Regulatory Compliance is responsible for plant compliance to NRC requirements, Corporate Nuclear Safety requirements and INPO guidelines. The Assistant to General Manager assists the General Manager Brunswick Plant in his duties. The revised facility organization is shown in Figure 6.2.2-1.

CP&L has restructured the Brunswick Steam Electric Plant's organization, to have the plant's Manager - Environmental and Radiation Control, (RPM) report to the Manager - Plant Operation (an assistant plant manager). Currently the plant's RPM reports to the Manager - Technical and Administrative. In addition the licensee has given the RPM direct communication lines with the Plant General Manager, the Corporate Health Physics and the Manager - Radiological and Chemical. Based on these communications lines the staff concludes that this part of the proposed plant organization meets the recommendations of NUREG-0731, "Criteria for Utility Management and Technical Competence and Regulatory Guide 8.8, Section C1.b(3) and is acceptable.

(4) Figure 6.2.2-2

The plant Fire Brigade organization has been revised to show the shift Fire Brigade reporting to the shift operating supervisor, and the fire protection support group and specialist reporting to the Principal Engineer Operations. This revised organization is shown in Figure 6.2.2-2.

(5) Table 6.2.2-1

The licensee has revised this table which specifies the minimum facility shift crew composition for various combinations of unit operating modes to conform to 10 CFR 50.54 in respect to licensed operators and to the July 31, 1980 interim shift criteria in respect to nonlicensed operators.

(6) Section 6.2.3

This is a new section that has been added. It provides for an On-site Nuclear Safety (ONS) unit that "shall function to examine facility operating characteristics, NRC issues, industry advisories, and other sources which may indicate areas for improving facility safety."

(7) Section 6.2.4

This is a new section that has been added. It provides a written description of the function of the Shift Technical Advisors.

(8) Section 6.5

This section has been extensively revised to allow for the review of many items by a designated reviewer(s) rather than by the Plant Nuclear Safety Committee (PNSC). The PNSC has been retained, but its responsibilities have been revised as described in Section 6.5.3.8. Additionally, the subsections have all been renumbered.

The responsibility for the Audit Program, Section 6.5.5 has been moved to the Performance Evaluation Unit of the Corporate Quality Assurance Department consistent with the revised corporate organization.

(9) Section 6.8.2

This section on temporary changes to procedures has been revised to include proposed tests and experiments. Additionally, CP&L has proposed that the time span allowed for approval of temporary changes to procedures, by the General Manager Brunswick Plant or his previously designated alternate, be extended from 14 days to 21 days. The staff considers 14 days to be adequate time for the approval or disapproval of a temporary change to procedures. Therefore, this change will not be granted and the approval time will remain 14 days.

(10) Consistent with the corporate and plant staff reorganization, title changes have been made throughout Sections 6.1 through 6.8.

We have reviewed the proposed changes to Sections 6.1 through 6.8 of the Brunswick Steam Electric Station, Units 1 and 2, and conclude they are acceptable as they meet our guidance described in Regulatory Guides 1.8 and 1.33, NUREG-0731, the interim criteria for shift staffing dated July 31, 1980, and the revised 10 CFR 50.54.

We have also reviewed the changes proposed for section 6.9; Reporting Requirements, 6.10; Record Retention, and 6.16; Environmental Qualification. The changes to sections 6.9, 6.10 and 6.12 were made to achieve consistency with NRC Standard Technical Specifications, to include notes from Regulatory Guide 1.16; Reporting of Operating Information, and to comply with the recommendations of NRC Generic Letters 83-02 and 83-36

regarding NUREG-0737 Technical Specifications. Section 6.16 was deleted in its entirety since the Environmental Qualification requirements have been superseded by the requirements of 10 CFR 50.49. We have found that these administrative changes are in conformance with the documents cited and are acceptable to the staff.

3.0 Environmental Considerations

We have determined that the amendments do not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendments involve an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR 51.5(d)(4), that an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

4.0 Conclusions

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Dated: May 25, 1984