CP&L

Carolina Power & Light Company

P. O. Box 1551 • Raleigh, N. C. 27602

FEB 11 1991

SERIAL: NLS-91-034
10 CFR 50.90
TSC 91TSB02

R. A. WATSON
Senior Vice President
Nuclear Generation

United States Nuclear Regulatory Commission
ATTENTION: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 & 50-324/LICENSE NOS. DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
OPERATIONS ORGANIZATION CHANGES

Gentlemen:

In accordance with the Code of Federal Regulations, Title 10, Parts 50.90 and 2.101, Carolina Power & Light Company (CP&L) hereby requests a revision to the Technical Specifications for the Brunswick Steam Electric Plant (BSEP), Units 1 and 2.

The proposed change to Technical Specification 6.2.2 will require the Manager - Operations to hold or have held a senior reactor operators (SRO) license. In addition, a one-time exception to the requirement for the Manager - Operations to hold or have held a senior reactor operator license is being proposed. Technical Specification Table 6.2.2-1, "Minimum Facility Shift Crew Composition" is being revised to reflect the consolidation of the Shift Operating Supervisor and Shift Foreman positions as a single SRO entry in the table. In addition, Technical Specifications 6.2.2.d and 6.2.4.1 are being revised to reflect the addition of an Operation Manager position for each unit and the elimination of the Shift Operating Supervisor's position.

Enclosure 1 provides a detailed description of the proposed changes and the basis for the changes.

Enclosure 2 details the basis for the Company's determination that the proposed changes do not involve a significant hazards consideration.

Enclosure 3 provides a summary of the proposed Technical Specification changes for each unit on a page by page basis.

Enclosure 4 provides additional information supporting the proposed changes described herein.

Enclosure 5 provides the proposed Technical Specification pages for Unit 1.

Enclosure 6 provides the proposed Technical Specification pages for Unit 2.

A001

In accordance with 10 CFR 50.90.91(b), CP&L is providing the State of North Carolina with a copy of the proposed license amendment.

In order to allow time for procedure revision and orderly incorporation into copies of the Technical Specifications, CP&L requests that the proposed amendments, once approved by the NRC, be issued with an effective date to be no later than 60 days from the issuance of the amendment.

Please refer any questions regarding this submittal to Mr. W. R. Murray at (919) 546-4661.

Yours very truly,

R A Watson

R. A. Watson

WRM/wrm (\opsmngr)

Enclosures:
1. Basis for Change Request
2. 10 CFR 50.92 Evaluation
3. Summary List of Revisions
4. Additional Information
5. Technical Specification Pages - Unit 1
6. Technical Specification Pages - Unit 2

cc: Mr. Dayne H. Brown
Mr. S. D. Ebneter
Mr. N. B. Le
Mr. R. L. Prevatte

R. A. Watson, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief; and the sources of his information are officers, employees, contractors, and agents of Carolina Power & Light Company.

Susie G. Bunn
Notary (Seal)

My commission expires: 3/28/92

ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
OPERATIONS ORGANIZATION CHANGES

BASIS FOR CHANGE REQUEST

Proposed Change 1:

Remove the Shift Operating Supervisor from Technical Specification 6.2.2 and Table 6.2.2-1. Increase the number of Senior Reactor Operators required to be on duty from one to two. Replace the reference in Technical Specification 6.2.2.d with a reference to the Operations Manager for each respective unit. Replace the reference in Technical Specification 6.2.4.1 to the Shift Operating Supervisor with a reference to the Shift Foreman for each respective unit.

Basis

The Operations organization is being restructured to provide for more effective management of unit-specific operations. The restructured organization eliminates the Shift Operating Supervisor function by instituting unit-specific Operations Managers that report to the Manager - Operations. These unit-specific Operations Managers are entitled Operations Manager - Unit 1 and Operations Manager - Unit 2.

Prior to the structuring, the Shift Operating Supervisors (SOS) reported to the Manager - Operations. This organizational structure caused the Manager - Operations to interface with multiple individuals from both Unit 1 and Unit 2 during the course of his duties. The new organization structure will allow the Manager - Operations to dedicate more time overall to his operations management responsibilities and will allow the Operations Managers to dedicate more time overall to their unit-specific functions. The Operations Managers will work non-shift hours rather than rotating shifts, as was the case for the Shift Operating Supervisors. The use of the Operations Managers as non-shift positions will, the Company believes, maintain senior reactor operator oversight that was previously provided by the Manager - Operations.

Both Operations Managers will hold an active senior reactor operator license. This will assure that supervision of operator activities continues to be by a senior reactor operator licensed individual.

Technical Specification Table 6.2.2-1 is being revised to eliminate the reference to the Shift Operating Supervisor. The number of senior reactor operators required in the table is being increased from one to two. This change will maintain the total number of senior reactor operator licensed

individuals assigned to a shift at two. Standard Review Plan Section 13.1.2, Table 1 specifies shift staffing requirements for two units sharing a common control room, as is the case for the Brunswick Plant. The Standard Review Plan requirements for shift staffing will continue to be met, with a senior reactor operator and a Shift Foreman fulfilling the "senior reactor operator" and the "shift supervisor" functions indicated in the Standard Review Plan table. Thus, the Brunswick shift staffing will continue to meet or exceed the minimum shift staffing specified in the Standard Review Plan.

Proposed Change 2:

Add to Technical Specification 6.2.2.d the requirement that the Manager - Operations hold or have held a senior reactor operator license for either the Brunswick Plant or a similar unit.

Basis

The Operations organization now includes Operations Manager - Unit 1 and Operations Manager - Unit 2 positions, each of whom are immediate supervisors of each unit's Shift Foremen and operating crew. Both Operations Managers and Shift Foremen hold active senior reactor operator licenses.

ANSI N18.1-1971 requires the individual providing the Manager - Operations function to hold a senior reactor operator license. The responsibilities of the Manager - Operations require a technically sound background, knowledge of nuclear plant operations, and a significant amount of time to administratively manage these functions. However, in-depth, plant-specific knowledge which is demonstrated by maintaining a senior reactor operator license is not necessary. The functions requiring such knowledge are performed by the Operations Manager - Unit 1 and the Operations Manager - Unit 2. The Operations Managers are responsible for adherence to the requirements of the Operating License and Technical Specifications, scheduling and reviewing surveillance tests, reviewing operating data, logs, and records, shift reports of equipment malfunctions or unusual system behavior, and initiating corrective action.

Much of the Manager - Operations' time must currently be dedicated to maintaining a senior reactor operator license. An average of thirteen (13) weeks each year are spent in classroom and simulator requalification and preparation for NRC testing required to maintain a senior reactor operator license. The Company believes that in the interest of nuclear safety, this time would be better spent by the Manager - Operations in the performance of his intended duties.

The proposed requirement to hold or have held a senior reactor operator license on either the Brunswick Plant or a similar facility will ensure that candidates for the Manager - Operations position have the background and knowledge of nuclear plant operations necessary to perform the duties required by the position without unduly taxing the time that the Manager - Operations can devote to these duties. The requirement for the Operations Manager

- Unit 1 and the Operations Manager - Unit 2 to hold a senior reactor operator license has been clearly specified in proposed Technical Specification 6.2.2.d.

The proposed change will allow CP&L management additional flexibility when selecting an individual to fill the Manager - Operations position. This ensures that the best available candidate can be chosen for a vacant Manager - Operations position. A major factor in this decision must be the status of the candidates' senior reactor operator license. Those individuals who are candidates for a senior reactor operator license require approximately 70 weeks of training. As such, it is conceivable that a more qualified person would be overlooked due to the need to promptly fill a vacant Manager - Operations position.

Attachment 1 of Enclosure 4 provides a job description for the former Shift Operating Supervisor position. Attachments 2, 3, and 4 of Enclosure 4 provide job descriptions of the Manager - Operations, Operations Manager - Unit 1/2, and Shift Foreman positions.

Proposed Change 3:

Add to Technical Specification 6.3.1 and proposed Technical Specification 6.2.2.e a one-time exception to the requirement for the Manager - Operations to comply with the proposed Technical Specification 6.2.2.e requirement for the 18 month period following issuance of the proposed license amendment.

Basis

An 18 month exception period is being proposed for the requirement that the Manager - Operations hold a senior reactor operator license to allow sufficient time to locate and train an individual to fill the Manager - Operations position who meets the requirement to hold or have held a senior reactor operator license.

During the 18 month exception period, Mr. J. W. Moyer will be assigned to the Manager - Operations position. Mr. Moyer has satisfactorily completed all classroom and simulator training equivalent to receiving a senior reactor operator license, the only difference being he did not participate in the NRC senior reactor operator examination process. Brunswick Training Instruction TI-202, Section 3.2 summarizes the classroom, simulator, and on-the-job training that senior reactor operator license candidates, including Mr. Moyer, receive prior to undergoing NRC examination. A copy of TI-202, Section 3.2 is provided as Attachment 5 of Enclosure 4 and provides more detail concerning the classroom, simulator, and on-the-job training received.

Attachment 6 of Enclosure 4 provides a resume summarizing the experience of Mr. J. W. Moyer, the individual who will fill the Manager - Operations position during the 18 month exception period.

Exemption of the requirement for the Manager - Operations to hold or have held a senior reactor operator license during the 18 month period following issuance of the proposed license amendment does not directly affect plant operations. The Manager - Operations will not manipulate the controls of the facility. The Operations Managers and Shift Foremen for each unit are responsible for assuring the safe, efficient, and reliable operation of each Brunswick unit. The Operations Managers and Shift Foremen will continue to hold active senior reactor operator licenses for the Brunswick units. In addition, the Company notes that currently our Shift Technical Advisors also hold active senior reactor operator licenses. The proposed change, therefore, meets the requirement of 10 CFR 50.54(l) that senior reactor operators be responsible for directing licensed activities of licensed operators.

During the proposed 18 month exception period, the Company agrees to notify the NRC prior to allowing an individual other than Mr. J. W. Moyer to fill the Manager - Operations position who does not meet the Proposed Technical Specification 6.2.2.e requirement to hold or have held a senior reactor operator license.

References

1. ANSI N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel," American Nuclear Society, March 8, 1971.

2. Code of Federal Regulations, Title 10, Part 50, Paragraph 50.54(1).

ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
OPERATIONS ORGANIZATION CHANGES

10 CFR 50.92 EVALUATION

The Commission has provided standards in 10 CFR 50.92(c) for determining whether a significant hazards consideration exists. A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety. Carolina Power & Light Company has reviewed this proposed license amendment request and determined that its adoption would not involve a significant hazards consideration. The bases for this determination are as follows:

Proposed Change 1:

Remove the Shift Operating Supervisor from Technical Specification 6.2.2 and Table 6.2.2-1. Increase the number of Senior Reactor Operators required to be on duty from one to two. Replace the reference in Technical Specification 6.2.2.d with a reference to the Operations Manager for each respective unit. Replace the reference in Technical Specification 6.2.4.1 to the Shift Operating Supervisor with a reference to the Shift Foreman for each respective unit.

Basis:

The change does not involve a significant hazards consideration for the following reasons:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The total number of senior reactor operator licensed personnel on shift remains unchanged. The change to the supervisor for the Shift Technical Advisors is also administrative in nature. The proposed changes do not physically alter the facility in any manner and, as such, do not affect the means in which any safety-related system performs its intended safety function.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. As stated in item 1 above, the proposed changes do not involve physical alterations of the plant configuration or changes in setpoints or operating parameters. The proposed change to the Shift Technical

Advisors' advisory capacity and the change to the shift staffing table are administrative in nature.

3. The proposed amendment does not involve a significant reduction in the margin of safety. As indicated above, the total number of senior reactor operator licensed personnel on shift remains unchanged. In addition, the change to the advisory capacity for the Shift Technical Advisors is also administrative in nature. The changes to the Operations organization, as reflected in the proposed change in the shift staffing table and the Shift Technical Advisors' advisory capacity, will enhance the overall effectiveness of the Operations and will serve to improve nuclear safety. Therefore, the margin of safety is not significantly reduced by the proposed changes.

Proposed Change 2:

Add to Technical Specification 6.2.2.d the requirement that the Manager - Operations hold or have held a senior reactor operator license for either the Brunswick Plant or a similar unit.

Basis:

The change does not involve a significant hazards consideration for the following reasons:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed change to allow the Manager - Operations to hold or have held a senior reactor operator license does not directly affect plant operations. The proposed change does not physically alter the facility in any manner and, as such, does not affect the means in which any safety-related system performs its intended safety function.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. As stated in Item 1, the proposed change does not involve physical alterations of the plant configuration or changes in setpoints or operating parameters and, therefore, no possibility of creating a new or different kind of accident.

3. The proposed amendment does not involve a significant reduction in the margin of safety. Requiring the Manager - Operations to hold a senior reactor operators license or to have held a senior reactor operators license ensures that candidates for the position have the background and knowledge of nuclear power plant operations necessary to perform these duties. However, the proposed change to allow the Manager - Operations to have held a senior reactor operator license on the Brunswick Plant or similar facility will alleviate some of the training burden for this individual. Alleviating the time the Manager - Operations is currently required to spend in classroom and simulator requalification and

preparation for NRC testing required to maintain a senior reactor operator license will allow him to dedicate that time to the performance of his intended duties, thereby enhancing overall nuclear safety and, therefore, increasing the margin of safety.

Proposed Change 3:

Add to Technical Specification 6.3.1 and proposed Technical Specification 6.2.2.e a one-time exception to the requirement for the Manager - Operations to comply with the proposed Technical Specification 6.2.2.e requirements for the 18 month period following issuance of the proposed license amendment.

Basis:

The change does not involve a significant hazards consideration for the following reasons:

1. The proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated. Exemption of the requirement for the Manager - Operations to hold or have held a senior reactor operator license during the 18 month period following issuance of the proposed license amendment does not directly affect plant operations. The Manager - Operations does not manipulate the controls of the facility. The Operations Managers and Shift Foremen for each unit are responsible for assuring the safe, efficient, and reliable operation of each Brunswick unit. The proposed change meets the requirement of 10 CFR 50.54(l) that senior reactor operators be responsible for directing licensed activities of licensed operators.

2. The proposed amendment does not create the possibility of a new or different kind of accident from any accident previously evaluated. As stated in Item 1, the proposed change does not involve physical alterations of the plant configuration or changes in setpoints or operating parameters and, therefore, no possibility of creating a new or different kind of accident.

3. The proposed amendment does not involve a significant reduction in the margin of safety. During the 18 month period following issuance of the proposed license amendment that the Manager - Operations is exempted from the requirement to hold or have held a senior reactor operator license, licensed operators will continue to operate the Brunswick Plant under the supervision of the Shift Foreman and Operations Manager for each unit, each of whom are required to hold a senior reactor operators license. The senior reactor operators license is not needed for the Manager - Operations since he does not and will not manipulate the controls of the Brunswick units; reactor operations will continue to be supervised by senior reactor operator licensed personnel. These considerations demonstrate that there is not a significant reduction in the margin of safety associated with the proposed change.

ENCLOSURE 3

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
OPERATIONS ORGANIZATION CHANGES

SUMMARY LIST OF REVISIONS

UNIT 1

Pages	Description of Changes
6-2	Revise TS 6.2.2.d reference to the Shift Operating Supervisor (SOS) by changing to the Operations Manager - Unit 1. Add a new TS 6.2.2.e requirement for the Manager - Operations to hold or have held an SRO license on the Brunswick Plant or a similar plant. Renumber existing items e, f, g, and h of TS 6.2.2. Add a footnote to new TS 6.2.2.e describing an 18 month exception period for the Manager - Operations to hold or have held an SRO license.
6-3	Eliminate reference to the SOS in TS Table 6.2.2-1. Revise the number of required SROs from one to two to reflect consolidation of previous SRO and SOS positions.
6-4	Eliminate reference to the SOS in TS Table 6.2.2-1 to reflect consolidation of previous SRO and SOS positions.
6-5	Revise TS 6.2.4.1 by changing the reference from the SOS to the Shift Foreman. Revise TS 6.3.1 by adding a footnote (a) describing an 18 month exception period for the Manager - Operations to hold or have held an SRO license.

UNIT 2

Pages	Description of Changes
6-2	Revise TS 6.2.2.d reference to the Shift Operating Supervisor (SOS) by changing to the Operations Manager - Unit 2. Add a new TS 6.2.2.e requirement for the Manager - Operations to hold or have held an SRO license on the Brunswick Plant or a similar plant. Renumber existing items e, f, g, and h of TS 6.2.2. Add a footnote to new TS 6.2.2.e describing an 18 month exception period for the Manager - Operations to hold or have held an SRO license.
6-3	Eliminate reference to the SOS in TS Table 6.2.2-1. Revise the number of required SROs from one to two to reflect consolidation of previous SRO and SOS positions.
6-4	Eliminate reference to the SOS in TS Table 6.2.2-1 to reflect consolidation of previous SRO and SOS positions.
6-5	Revise TS 6.2.4.1 by changing the reference from the SOS to the Shift Foreman. Revise TS 6.3.1 by adding a footnote (a) describing an 18 month exception period for the Manager - Operations to hold or have held an SRO license.

ENCLOSURE 4

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 AND 2
NRC DOCKETS 50-325 & 50-324
OPERATING LICENSES DPR-71 & DPR-62
REQUEST FOR LICENSE AMENDMENT
OPERATIONS ORGANIZATION CHANGES

ADDITIONAL INFORMATION

ENCLOSURE 4

ATTACHMENT 1

JOB DESCRIPTION FOR FORMER
SHIFT OPERATING SUPERVISOR POSITION

CAROLINA POWER & LIGHT COMPANY

JOB DESCRIPTION - EXEMPT

JOB TITLE:	Shift Operating Supervisor	PREPARED BY:	KDS
INCUMBENT:		DATE PREPARED:	09/02/90
GROUP:	Nuclear Generation	APPROVALS:	
DEPARTMENT:	Brunswick Nuclear Project	_____	
SECTION:	Brunswick Plant	Incumbent	
UNIT:	Operations	_____	
REPORTS TO:	Manager - Operations	Immediate Supervisor	

SUMMARY OF JOB:

This position is accountable for directing the operation of nuclear generating units at optimum efficiency, reliability, availability, and cost-effectiveness consistent with industrial and nuclear safety measures and in compliance with technical specifications, CP&L operating procedures and criteria, and with the licenses and regulations of the NRC.

DIMENSIONS:

Plant Value:	$850 million
Operating Budget:	$800,000
Plant Capability:	1580 MW
Personnel Directly Supervised:	4
Actual Personnel Supervised Directly and Indirectly	20

NATURE AND SCOPE:

The Shift Operating Supervisor reports directly to the Manager - Operations along with other Shift Operating Supervisors, Principal Engineers - Operations, and a Radwaste Supervisor. Subordinate positions include Shift Foreman - Nuclear, Senior Control Operator, Control Operator, Senior Auxiliary Operator, Auxiliary Operator, and Production Assistant - Operations. As the Shift Operating Supervisor (SOS), the incumbent is primarily responsible for optimizing operation of the plant generating units within technical specifications, regulatory requirements, and operating procedures to meet system load requirements during the shift operation with foremost concern for nuclear safety.

The Shift Operating Supervisor is directly accountable for the operating status of the plant during shift operations. Critical aspects of this overall responsibility are: making technical decisions concerning whether the plant should stay on line, reduce power, etc., based on evaluation of problems and conditions; directing plant operations to meet system load demand changes which cause plant output to be economically vital; and providing guidance on operational problems not specifically covered by procedures. The incumbent keeps the Manager - Operations, Load Dispatchers, and the relieving Supervisor informed of plant status and performance.

In striving to attain the highest plant efficiency and reliability, and to achieve departmental generating-unit availability and heat rate goals, the incumbent takes corrective steps to improve availability, ensures that procedures outlining the most efficient operating modes are used; and continuously evaluates plant efficiency and reliability to identify and implement actions to assure that system load requirements are met and that heat rates at design ratings are obtained.

More frequent functions performed include: plan, direct, and/or coordinate plant startups, maintenance, and resolution of problems; direct Shift Foremen in supervising plant operations on assigned shift; review plant operations by surveillance and inspection of records, logs, tests, procedures, chemistry and health physics reports, and technical specifications; ensure that personnel are scheduled to provide proper, continuous shift coverage; provide for the review, update, and staff cognizance of the plant operation manuals; and interface with regulatory agencies to resolve questions of compliance.

One important function of this position is the annual refueling outage for each of the two nuclear generating units. Such outages are scheduled for a seven to twenty-two week period per year. Replacement costs make it a primary concern to effectively coordinate with and support all other plant sections during these outages.

Since maintenance, repairs, and tests are performed and modifications installed on equipment operated by Operations personnel, close coordination is required with all plant groups in setting priorities, developing schedules, coordinating work, reporting/checking on plant status, resolving equipment problems, and complying with all Operations and regulatory requirements. Particularly close interface is necessary with reactor and performance engineers in Technical Support, and with Radwaste Operations, Maintenance, Regulatory Compliance, Nuclear Safety Review, and Environmental & Chemistry Supervisors and staff.

Due to the nature of job functions, plant operating personnel are required to acquire/maintain RO/SRO licenses and are therefore subject to highly technical and intensive training/retraining requirements and stringent qualification tests administered by the NRC. The incumbent is accountable for retaining an SRO license and ensures that shift personnel are provided the necessary training to acquire/maintain theirs.

Under emergency conditions, the Shift Operating Supervisor assumes the role of Site Emergency Coordinator until relieved by the General Manager. In this capacity, the incumbent is responsible for classifying the emergency event, notifying outside emergency agencies, and coordinating outside support and assistance as required.

In maintaining a high level of productivity, morale, and motivation, the incumbent provides clear definition of responsibility and authority, proper delegation and scheduling of work, and effective utilization and development of personnel; and ensures the proper application of company personnel and salary guidelines. In supporting cost-effective plant operation, the incumbent provides budget input; controls purchases within guidelines and policies, and costs within the budget; ensures that approved budget items are completed as scheduled when within span of control; and ensures that work is accomplished in the most efficient manner.

The incumbent prepares and manages a realistic and challenging dose budget for the group and ensures that subordinates comply with radiation safety rules and procedures. Subordinates are encouraged to submit suggestions that will lead to lower radiation exposure levels.

The incumbent is responsible for maintaining radwaste generation at the lowest possible levels. This is accomplished by minimizing the generation of radwaste by subordinates and by planning and executing work in accordance with plant radwaste reduction procedures. The incumbent also minimizes the extent of contaminated areas by ensuring that his/her personnel follow good housekeeping practices and proper work procedures.

ACCOUNTABILITIES:

1. DIRECT AND CONTROL THE OPERATION OF NUCLEAR GENERATING UNITS on assigned shift to ensure safe, reliable, an economic operations.

2. MAINTAIN/INCREASE KNOWLEDGE AND EXPERTISE TO RETAIN AN SRO LICENSE and to effectively direct shift operations.

3. OPTIMIZE OPERATION OF THE NUCLEAR UNITS WITHIN TECHNICAL SPECIFICATION, REGULATORY REQUIREMENTS, AND OPERATING PROCEDURES to meet system load requirements during the shift of operation.

4. SUPPORT EFFECTIVE PLANNING, BUDGETING, COST CONTROL, AND COMMUNICATIONS to accomplish organizational goals and objectives.

5. EVALUATE PLANT EFFICIENCY AND RELIABILITY DATA to identify concerns and implement actions to achieve departmental generating unit availability and heat rate goals.

6. CONTROL PLANT OPERATIONS in a manner that ensures the highest possible level of nuclear safety and protection of the health and safety of employees and the general public.

7. Promote an EFFECTIVE SHIFT OF OPERATION WITH APPROPRIATE EMPHASIS ON TRAINING AND MOTIVATING EMPLOYEES; and through effective and timely support to other plant organizations and outside contacts.

8. Ensure EFFECTIVE PROJECT ALARA AND RADWASTE VOLUME REDUCTION PROGRAMS by meeting assigned goals for man-rem and radwaste volume, minimizing radiation safety violations by subordinates, encouraging ALARA suggestions from subordinates and requiring that subordinates perform work in such a manner as to reduce personnel exposure and radwaste generation, and to minimize the spread of contamination.

9. Support ACHIEVEMENT OF DEPARTMENT, SECTION, AND UNIT GOALS through effective teamwork and working relationships, and UTILIZATION OF TOTAL QUALITY techniques and processes.

10. CONTRIBUTE TO COST-EFFECTIVE PLANT OPERATIONS by planning and accomplishing work as to maximize the effective utilization of personnel, equipment, and materials and maintaining expenditures within budget.

ENCLOSURE 4

ATTACHMENT 2

JOB DESCRIPTION FOR MANAGER - OPERATIONS

CAROLINA POWER & LIGHT COMPANY

JOB DESCRIPTION - EXEMPT

JOB TITLE:	Manager - Operations	PREPARED BY:	
INCUMBENT:		DATE PREPARED:	04/24/86
GROUP:	NG	APPROVALS:	
DEPARTMENT:	Brunswick Nuclear Project	_____ Incumbent	
SECTION:	Brunswick Plant		
UNIT:	Operations	_____ Immediate Supervisor	
REPORTS TO:	General Manager - Brunswick Plant		

SUMMARY OF JOB

This position is accountable for ensuring GENERATION OF THE MAXIMUM AMOUNT OF ELECTRIC POWER FROM GENERATING UNITS IN COMPLIANCE WITH PLANT TECHNICAL SPECIFICATIONS, NUCLEAR SAFETY (NS), QUALITY ASSURANCE (QA), CORPORATE HEALTH PHYSICS (CHP), SECURITY, RADIATION CONTROL, SAFETY AND REGULATORY REQUIREMENTS, AND ECONOMIC CONSIDERATIONS by managing the planning, directions, and control of a competent, qualified, licensed Operations organization; ensuring operator training and retraining is provided; ensuring procedures for efficient operating modes are followed; and efficiency, availability, and heat rate are evaluated and action for needed improvements is taken.

DIMENSIONS

Plant Value:	$950,000,000
Capacity:	1642 MW
Personnel Supervised:	
Directly:	2
Indirectly:	191

NATURE & SCOPE

Replacement costs for electric power produced by nuclear energy make it a primary concern to keep nuclear units operating at maximum capacity, availability, reliability, and efficiency. With the possible serious safety, health, environmental, and economic impact of an operator error, managing/optimizing shift operation of the BWRs is a tremendous responsibility. Maintaining cognizance of and implementing stringent regulations and requirements of the NRC, other regulatory agencies such as EPA, OSHA, FERC, NS, in-plant and CQA, and CHP, places additional demands on operating supervision.

The Manager - Operations is responsible for optimizing operation of the plant's nuclear generating units within technical specifications and operating procedures to meet system load requirements. Major considerations include maximizing efficiency, reliability, availability, safety, and economic generation while ensuring plant operation is in compliance with regulatory requirements.

The Operations Subunit is organized into two basic areas: 1) shift operations supervision with technical engineering and plant coordination support for shift operations, and 2) technical engineering support for overall plant operations and fire protection.

The incumbent ensures corrective steps are taken to improve availability and procedures used to outline the most efficient operating modes are utilized. The manager also provides for continuing evaluation of plant safety, efficiency, and reliability and identification and implementation of actions to assure system load requirements are met and heat rates at design ratings are obtained.

The Manager - Operations delegates direct accountability for the operating status of the plant to the Operations Superintendent and Principle Engineer. Some more critical aspects of responsibility for shift operations are: ensuring proper maintenance of fire protection equipment; making technical decisions concerning whether the plant should stay on line, reduce power, etc. based on evaluation of problems and conditions; managing plant operations to meet system load demand changes which cause plant output to be economically vital; and providing guidance on operational problems not specifically covered by procedures. The incumbent is kept informed by the Operations Superintendent, Principle Engineer, and load dispatchers of plant status and performance. During an emergency, or other unusual operation conditions, more frequent communication is maintained to allow for effective planning.

The incumbent provides for the review, update, and staff cognizance of the plant Operating Manual (18 volumes) and works with regulatory agencies to resolve questions of compliance.

Since maintenance, repairs, and tests are performed and modifications installed on equipment, systems, instrumentation and controls operated by operating personnel, and all activities are subject to health physics, radiation control, safety, QA, and security plant administrative requirements, close coordination is required with all plant groups in setting priorities, developing schedules, and coordinating daily work and modification installation: reporting/checking on plant status, resolving equipment problems, complying with technical specifications, and completing forms, reports and documentation, etc.

Replacement costs make it a primary concern to effectively coordinate with and support all other plant sections during the actual refueling outages to assist in preventing costly delays and to reduce outage time if at all possible.

The Manager - Operations is responsible to ensure a technically competent, well-trained Operations organization is maintained. Filling positions expeditiously with qualified personnel in accordance with company policies are direct responsibilities of the incumbent. The manager provides training for new employees and developing the management potential of supervisory personnel. Plant operating personnel are required to maintain SRO/RO licenses and are subject to technical training and retraining requirements and stringent qualification tests administered by the NRC. Operations training is coordinated with the plant Training Supervisor, Principal Specialist - Generation Training at the HE&EC, BWR simulator training firms, and Management Development Staff.

In maintaining a high level of productivity, morale, and motivation, the incumbent provides clear definition of responsibility and authority; proper delegation and scheduling of work, and effective utilization; ensures that fair and appropriate administration of company personnel and salary administration policies. Safety is a high priority concern. All available methods to prevent injury to employees and contract forces are enforced through subordinates' supervisors and foremen.

Matters involving variances and changes from the approved budgets and manpower allocation are subject to approval at the Senior Vice Presidential level. The incumbent is free to exercise managerial judgment within this framework subject to additional constraints which may be required by the General Manager. Performance of the incumbent and operating personnel is almost continuously audited by off-site inspection groups to monitor/assure compliance with corporate objectives and various regulatory requirements.

Primary external contacts of the incumbent include NRC inspectors regarding reactor operator license testing, technical specifications limitations, operational audits, resolution of compliance questions and personal interviews; technical representatives from GE, UE&C, and other vendors to discuss plant operation problems or update information for operation; and other utilities for exchange of operating information.

The Manager - Operations serves as Director - Plant Operations during plant emergencies and serves on the Plant Nuclear Safety Committee. During absence of the General Manager, the incumbent may be designated Acting General Manager.

The incumbent prepares and manages a realistic and challenging dose budget for his/her group and ensures that subordinates comply with radiation safety rules and procedures. Subordinates are encouraged to submit suggestions that will lead to lower radiation exposure levels.

The incumbent is responsible for maintaining radwaste levels at the lowest possible levels. This is accomplished by minimizing the generation of radwaste by subordinates and by planning and executing work in accordance with plant radwaste reduction procedures. The incumbent also minimizes the extent of contaminated areas by ensuring that his/her personnel follow good housekeeping practices and proper work procedures.

ACCOUNTABILITIES

1. Ensure NO ADVERSE IMPACT ON THE GENERAL HEALTH AND WELFARE OF THE GENERAL PUBLIC AND THE EMPLOYEES AND ENSURE RADIATION EXPOSURE TO THE GENERAL PUBLIC AND EMPLOYEES IS MAINTAINED AS LOW AS REASONABLY ACHIEVABLE (ALARA) by providing full support to the plant radiation protection program and NS, CHP, and CQA programs.

2. Ensure that OPERATION'S ACTIVITIES ARE CONDUCTED IN COMPLIANCE WITH TECHNICAL SPECIFICATIONS, REGULATORY REQUIREMENTS, FEDERAL, STATE, LOCAL LAWS, COMPANY POLICIES, AND PLANT PROCEDURES by maintaining currency on applicable regulatory requirements, laws, policies, and procedures; ensuring Operations personnel are trained and operation activities are performed in compliance with technical specifications and other requirements; and by following up on audit/review results.

3. Ensure EFFICIENT, RELIABLE, ECONOMICAL ELECTRIC GENERATION FROM THE PLANT TO MEET SYSTEM LOAD REQUIREMENTS by managing the planning and execution of plant operations; ensuring availability and heat rate goals are obtained, and the plant's performance program procedures and testing implementation are supported; and by maximizing shift operations through direct subordinates.

4. Provide for the SAFETY OF OPERATIONS PERSONNEL AND SUPPORT OF THE PLANT SAFETY PROGRAM/GOALS by ensuring the plant safety program is implemented; requiring proper safety training; and ensuring adequate safety equipment is provided, safety rules are enforced, high housekeeping standards are maintained, unsafe conditions and practices are identified and corrected, CP&L Safety Manual rules and OSHA regulations are complied with, and safety is a part of all Operations performance evaluations.

5. Ensure COST CONTROL EFFECTIVENESS by establishing an effective cost control system; ensuring deviations receive proper management approval; and by providing timely completion and submission of budget inputs.

6. Establish and maintain a HIGH LEVEL OF PRODUCTIVITY, MORALE, AND MOTIVATION by supporting an effective employee information program; ensuring appropriate application of company salary administration and personnel policies, objective performance evaluations, and prompt response to employee concerns; applying motivational management; and implementing systems to monitor and improve productivity.

7. Support NUCLEAR OPERATIONS DEPARTMENT EFFORTS TO KEEP THE PUBLIC INFORMED ON MATTERS RELATED TO NUCLEAR POWER GENERATION by providing department- requested information and data within a reasonable time and by ensuring effective interface with the news media as directed.

8. Ensure EFFECTIVE PROJECT ALARA AND RADWASTE VOLUME REDUCTION PROGRAMS BY MEETING ASSIGNED GOALS for man-rem and radwaste volume, MINIMIZINGRADIATION SAFETY VIOLATIONS by subordinates, ENCOURAGING ALARASUGGESTIONS from subordinates and requiring that subordinates perform WORK in such a manner as to REDUCE PERSONNEL EXPOSURE AND RADWASTE GENERATION, AND TO MINIMIZE the SPREAD OF CONTAMINATION.

9. Support ACHIEVEMENT OF DEPARTMENT, SECTION, AND UNIT GOALS through effective teamwork and working relationships, and UTILIZATION OF TOTAL QUALITY techniques and processes.

ENCLOSURE 4

ATTACHMENT 3

JOB DESCRIPTION FOR OPERATIONS MANAGERS - UNIT 1/2

CAROLINA POWER & LIGHT COMPANY

Position Description

Position Title: Operations Manager - Unit 1/2 **Prepared By:** CBW

Incumbent: **Date Prepared:** July 26, 1990

Group:

Department: Brunswick Nuclear Project **Approvals:** 1) _____
Incumbent

Section: Operations

Reports To: Manager - Operations - Nuclear 2) _____
Immediate Supervisor

SUMMARY OF POSITION

This position is accountable for directing the operation of nuclear generating units at optimum efficiency, reliability, availability, and cost effectiveness consistent with industrial and nuclear safety measures and in compliance with technical specifications, CP&L practice of conduct of operations philosophy, and within the regulations of the NRC.

DIMENSIONS

Operating Budget	$
Number Supervised	
Unit 1	
Directly	6
Indirectly	40
Unit 2	
Directly	6
Indirectly	45

NATURE & SCOPE

The Operations Manager - Unit 1/2 reports directly to the Manager - Operations - Nuclear. Subordinate positions include Shift Foreman - Nuclear, Production Assistant - Operations and one Senior Clerk. The incumbent is primarily responsible for optimizing operation of

the plant generating units within technical specifications, regulatory requirements, and operating procedures to meet system load requirements during the unit shift of operation.

The Operations Manager is accountable for the operating status of the unit during shift operations. Critical aspects are: making technical decisions concerning whether the plant should stay on line, reduce power, etc., based on evaluation of problems and conditions; directing plant operations to meet system load demand change; and providing guidance on operational problems not specifically covered by procedures.

To attain the highest plant efficiency and reliability, and to achieve departmental generating-unit availability and heat rate goals, the incumbent takes correction action to improve availability, ensures that procedures outlining the most efficient operating modes are used; and continuously evaluates plant efficiency and reliability to identify and implement actions to assure that system load requirements are met and that heat rates at design ratings are obtained.

The incumbent plans, directs, and/or coordinates plant start ups, maintenance, and resolution of problems; directs Shift Foreman in supervising plant operations, reviews plant operations reports and technical specifications; ensures that personnel are scheduled to provide proper, continuous shift coverage; provides for the review, update, and staff cognizance of the plant Operation Manuals; and interfaces with regulatory agencies to resolve questions of compliance.

Close coordination is required with all plant groups in setting priorities, developing schedules, coordinating work, reporting/checking on plant status, resolving equipment problems, and complying with all Operations and regulatory requirements. Particularly close interface is necessary with reactor and performance engineers in Technical Support, and with Radwaste Operations, Maintenance, Regulatory Compliance, Nuclear Safety Review, and Environmental & Chemistry Supervisors and staff.

Plant Operating personnel are required to acquire/maintain RO/SRO licenses and are therefore subject to highly technical tests administered by the NRC. The incumbent is accountable for retaining an SRO license and ensures that shift personnel are provided the necessary training to acquire/maintain theirs.

The incumbent provides clear definition of responsibility and authority, proper delegation and scheduling of work, and effective utilization and development of personnel. In supporting cost-effective plant operation, the incumbent provides budget input; controls purchases within guidelines and policies, and costs within the budget; ensures that approved budget items are completed as scheduled when within span of control; and ensures that work is accomplished in the most efficient manner.

The incumbent prepares and manages a realistic and challenging dose budget for the group and ensures that subordinates comply with radiation safety rules and procedures. The incumbent is responsible for maintaining radwaste generation at the lowest possible levels. The incumbent also minimizes the extent of contaminated areas by ensuring that personnel follow good housekeeping practices and proper work procedures.

ACCOUNTABILITIES

1) Direct and control the operation of nuclear generating units on assigned unit to ensure safe, reliable, and economic operations.

2) Maintain/increase knowledge and expertise to retain an SRO license/certification and to effectively direct unit operations.

3) Ensure consistent practice of operations within Technical Specification, regulatory requirements, and operating procedures to meet System load requirements.

4) Support effective planning, budgeting, cost control, and communications to accomplish organizational goals and objectives.

5) Evaluate plant efficiency and reliability data to identify concerns and implement corrective actions to achieve departmental generating unit availability and heat rate goals.

6) Promote an effective unit of operation with appropriate emphasis on training and motivating employees; and through effective and timely support to other plant organizations and outside contacts.

7) Ensure effective Project ALARA and radwaste volume reduction programs.

ENCLOSURE 4

ATTACHMENT 4

JOB DESCRIPTION FOR SHIFT FOREMEN

CAROLINA POWER & LIGHT COMPANY

JOB DESCRIPTION - EXEMPT

JOB TITLE:	Shift Foreman - Nuclear	PREPARED BY:	KDS
INCUMBENT:		DATE PREPARED:	09/01/90
DEPARTMENT:	Brunswick Nuclear Project	APPROVALS:	
SECTION:	Brunswick Plant	_____	
UNIT:	Operations	Incumbent	
SUBUNIT:	Shift Operations - Nuclear	_____	
REPORTS TO:	Shift Operating Supervisor	Immediate Supervisor	

SUMMARY OF JOB:

This position is accountable for supervising the operation of a nuclear generating unit to ensure safe, reliable, and efficient generation of power consistent with industrial and nuclear safety measures and in strict compliance with technical specifications, CP&L operating procedures and criteria, and with the licenses and regulations of the NRC.

DIMENSIONS: (1985)

Unit Value:	$425 million
Operating Budget:	$400,000
Capability:	790 MW
Personnel Directly Supervised:	8

NATURE AND SCOPE:

The Shift Foreman - Nuclear reports to the Shift Operating Supervisor along with the other Shift Foremen, a Technician - Operations and a Production Assistant - Operations. Subordinate positions include: Auxiliary Operators, Control Operators, and a Senior Control Operator. The position is established to provide technical and administrative supervision to the operating shift. Technical responsibilities relate primarily to ensuring the nuclear safety of plant operations in compliance with technical specifications while meeting load requirements and plant efficiency, performance, and reliability goals. Administrative responsibilities are associated with the documentation requirements for operating the plant, administering personnel/salary guidelines, and training responsibilities.

During shift operations, the Shift Foreman - Nuclear supervises nuclear control and Auxiliary Operators in monitoring the unit's performance; and coordinates activities inside/outside of the Control Room to ensure that operations are being controlled properly, operating procedures are followed, and technical specifications are not violated. The incumbent assists with clearance of equipment, problems, or operation of the Control Room when activity is high or personnel are not available. This position is responsible for directing Control Operators in the execution of the Emergency Operating Procedures during plant transients and accident conditions.

The Shift Foreman - Nuclear ensures that operators follow established plant operating procedures for making adjustments to systems and keeping the plant performing at peak efficiency while compensating for equipment malfunctions. Any deviation from established procedures requires approval by the incumbent who in turn reports such deviation to the Shift Operating Supervisor. The incumbent may return the nuclear unit to criticality in the event of reactor trip with supervisory approval. Restoration of other components of the nuclear unit may be accomplished at the incumbent's discretion.

The Shift Foreman - Nuclear oversees the surveillance testing program prescribed in the technical specifications to ensure optimum plant performance. The incumbent reviews Operations periodic tests (PTs) to verify compliance with technical specification and initiates corrective action when needed. During refueling operations, the Foreman directs SROs as required to perform nuclear fuel movements and inspection during fuel handling operations.

The Shift Foreman - Nuclear is responsible for controlling modification installation activities to ensure safe plant operations during outages. The incumbent reviews modification packages to determine the need for and development of procedural changes for the Operating Manual. All Operating Manual changes are required reading and must be interpreted and applied to plant operations. The Foreman ensures that subordinates are cognizant of these changes. The incumbent ensures adequate and appropriate documentation and accounting for the operation of the nuclear unit as required by the NRC.

The incumbent prepares, at the beginning of the shift a report of criticality outlining the operating status of the nuclear plant equipment, performs an early review of planned activities to determine if special considerations or precautions are warranted; and communicates plans/procedures of upcoming off-normal, or infrequent operations to shift personnel.

Due to the nature of job functions, plant operating personnel are required to acquire/maintain RO/SRO licenses and are therefore subject to highly technical and intensive training/retraining requirements and stringent qualification tests administered by the NRC. The incumbent is accountable for retaining an SRO license and ensures that shift personnel are provided the necessary training to acquire/maintain theirs.

The Shift Foreman - Nuclear serves as Fire Brigade Chief in the absence of the Senior Control Operator. The fire crew is responsible for extinguishing all on-site fires. If assistance is required by off-site firemen, the Fire Brigade Chief is responsible for directing the efforts of everyone involved. This responsibility is delegated to this position because of the incumbent's knowledge of plant system and NRC regulations.

Supervisory responsibilities include: recommending hiring, dismissal, promotions, and salary increases; defining responsibility and authority; proper work delegation and scheduling; developing, motivating, and effectively utilizing subordinates; maintaining high levels of productivity; and applying company policies.

The incumbent prepares and manages a realistic and challenging dose budget for the group and ensure that subordinates comply with radiation safety rules and procedures. Subordinates are encouraged to submit suggestions that will lead to lower radiation exposure levels.

The incumbent is responsible for maintaining radwaste generation at the lowest possible levels. This is accomplished by minimizing the generation of radwaste by subordinates and by planning and executing work in accordance with plant radwaste reduction procedures. The incumbent also minimizes the extent of contaminated areas by ensure that his/her personnel follow good housekeeping practices and proper work procedures.

ACCOUNTABILITIES:

1. SUPERVISE THE OPERATION OF A NUCLEAR GENERATING UNIT to ensure efficient, reliable, and economical generation to meet system load requirements on assigned shift.

2. MAINTAIN/INCREASE KNOWLEDGE AND SKILLS TO RETAIN AN SRO LICENSE and to effectively provide technical and administrative supervision to the operating shift.

3. ENSURE THAT SHIFT OPERATIONS ACTIVITIES ARE IN COMPLIANCE with technical specifications, regulatory requirements, and department and corporate policies and procedures.

4. Ensure ADEQUATE AND APPROPRIATE DOCUMENTATION AND ACCOUNTING for the operation of the nuclear unit as required by the NRC.

5. MAINTAIN A COMPETENT, QUALIFIED SHIFT OPERATIONS STAFF AND A HIGH LEVEL OF PRODUCTIVITY AND MORALE.

6. Contribute to COST-EFFECTIVE, IMPROVED PLANT OPERATIONS AND EFFECTIVE COMMUNICATIONS.

7. Ensure EFFECTIVE PROJECT ALARA AND RADWASTE VOLUME REDUCTION PROGRAMS by meeting assigned goals for man-rem and radwaste volume, minimizing radiation safety violations by subordinates, encouraging ALARA suggestions from subordinates and requiring that subordinates perform work in such a manner as to reduce personnel exposure and radwaste generation, and to minimize the spread of contamination.

8. Support ACHIEVEMENT OF DEPARTMENT, SECTION, AND UNIT GOALS through effective teamwork and working relationships, and UTILIZATION OF TOTAL QUALITY techniques and processes.

9. ENSURE THAT WORK IS CONDUCTED WITH APPROPRIATE EMPHASIS ON EMPLOYEE SAFETY, radiation protection, security, and other programs designed to protect the welfare of employees and the public.

ENCLOSURE 4

ATTACHMENT 5

TRAINING INSTRUCTION TI-202, SECTION 3.2

3.2 Training Requirements

The Senior Reactor Operator Candidate Training Program will consist of scheduled lectures and self-study in the classroom, simulator exercises conducted on a plant-specific simulator, and on-the-job training.

3.2.1 Senior Reactor Operator candidates without a four-year degree:

a. Classroom phase will consist of lectures or self-study in the following areas:

1. Reactor Theory

(a) Source neutron
(b) Reactivity coefficients
(c) Effects of neutron absorber
(d) Integral and differential rod worth
(e) Xenon and samarium curves
(f) Reactor kinetics

2. Heat Transfer, Fluid Flow, and Thermodynamics

(a) Basic properties of fluids and matter
(b) Fluid statics
(c) Fluid dynamics
(d) Heat transfer by conduction, convection, and radiation
(e) Change of phase boiling
(f) Burnout and flow instability
(g) Reactor heat transfer limits

3. Nuclear Systems Including Emergency Core Cooling Systems

(a) Reactor vessel instrumentation
(b) Neutron monitoring
(c) Reactor manual control
(d) High pressure coolant injection
(e) Residual heat removal
(f) Core spray
(g) ADS
(h) Primary containment isolation
(i) Primary and secondary containment

4. Mitigating Core Damage

(a) In-core instrumentation
(b) Vital instrumentation
(c) Primary chemistry
(d) Radiation chemistry
(e) Gas generation

5. Core Parameters

   (a) Safety limits
   (b) Limiting safety systems
   (c) Core thermal limits
   (d) Preconditioning limits

6. Transient and Accident Analysis

   (a) Anticipated transients
   (b) Design basis accidents

7. Fuel Handling

   (a) Fuel characteristics
       (1) Mechanical
       (2) Nuclear
       (3) Thermal
       (4) Decay heat
   (b) Fuel leak detection
   (c) Fuel storage facilities
   (d) Fuel handling
       (1) Core alterations
       (2) Tools and equipment
       (3) Fuel handling and inspection procedures
   (e) Inadvertent criticality
       (1) Incidents
       (2) Recognition
       (3) Refueling interlocks and other prevention measures
   (f) Inverse count rate calculations

8. Integrated Plant Response

   (a) Core power-flow map
   (b) Electro-Hydraulic Control System
   (c) Boiling and heat transfer in the core

9. Administrative Procedures, Conditions, and Limitations

   (a) Technical specifications
   (b) Facility operating license
   (c) POM, Volume I, Administrative Procedures
       (1) Duties and responsibilities
       (2) Operation conduct
       (3) Operating discipline and philosophy
   (d) Volume XIII, Emergency Plan
   (e) Volume IV, Generating Operating Procedure
   (f) Quality Assurance
   (g) FP-07
   (h) 10CFR50 and 55

10. Supervisory Skills Training

a. Candidates shall complete

(1) Professionalism and personal effectiveness skills (MD095) or equivalent.

(2) Aberrant behavior workshop.

b. Candidates should complete effective writing workshop (MD017) or equivalent. This course will normally be scheduled during SRO training. If this course cannot be scheduled prior to completion of the SRO class, it will be the responsibility of Operations to schedule this class as soon as possible thereafter.

b. Simulator phase will consist of simulator exercises conducted on a plant-specific simulator. Exercises will consist of the following:

1. Normal plant operation
2. Plant transients
3. Equipment malfunction
4. Decision-making and problem-solving situation

c. On-the-Job Training (OJT)

Candidates will have a minimum of three months on shift as an extra person in training for a position as Senior Reactor Operator. During this time, the candidate will perform duties of the SRO including items specified in the SRO Qual Card, Attachment 7. Conduct of OJT training will be in accordance with Attachment 3, Conduct of Senior Reactor Operator Candidate OJT.

3.2.2 SRO candidates with a four-year degree will attend the following training:

a. An instant SRO candidate must complete a minimum of three weeks on shift as an Auxilary Operator and complete a modified AO Qual Card, Attachment 5.

b. An instant SRO candidate must successfully complete Sections 3.3 and 3.4 of TI-201, Reactor Operator Replacement Training Instruction and complete a modified RO Qual Card, Attachment 6.

c. Simulator Training

Besides Section 3.4 of TI-201, the SRO candidate will also get approximately two weeks of simulator training as a SRO.

d. On-the-Job Training

Candidates will have a minimum of three months on shift as an extra person in training for a position as Senior Reactor Operator. During this time, the candidate will perform duties of the SRO including items specified in the SRO Qual Card, Attachment 7. Conduct of OJT training will be in accordance with Attachment 4, Conduct of Instant Senior Reactor Operator Candidate OJT.

e. Reactivity

1. Each candidate is required to have five reactivity manipulations on the Brunswick facility. These reactivity changes should be diversified.

2. All instant SROs will go to North Carolina State University and participate in ten reactor start-ups as specified in the Brunswick cold license program.

f. Supervisory Skills Training

1. Candidates shall complete

(a) Professionalism and personal effectiveness skills (MD095) or equivalent.

(b) Aberrant behavior workshop.

2. Candidates should complete effective writing workshop (MD017) or equivalent. This course will normally be scheduled during SRO training. If this course cannot be scheduled prior to completion of the SRO class, it will be the responsiblity of Operations to schedule this class as soon as possible thereafter.

3.3 Successful Completion

Successful completion requires that the candidate pass the final in-house exam with a score of greater than 70% in each category and 80% overall. He must also have an overall average of 80% for the entire training period.

ENCLOSURE 4

ATTACHMENT 6

RESUME FOR J. W. MOYER

JOHN W. MOYER
Technical Assistant to Plant General Manager
October 22, 1943

EDUCATION & TRAINING

A. Warsaw High School, Warsaw, Indiana - 1961

B. University of South Carolina - BS Management - 1978 - Summa Cum Laude

C. United States Navy - 1961 to 1983 (Commissioned 1978)

1. Missile Technician "A" School
2. Missile Technician "C" School
3. Poseidon Missile School
4. Instructor Training School
5. Submarine Weapons Officer School

D. SRO Certified, BSEP, 1989

EXPERIENCE

A. U. S. Navy

1. September 1961 - June 1983, Lieutenant, Submarine and Surface Warfare Officer, Weapons Officer, Nuclear Weapons Officer

B. Carolina Power & Light Company

1. June 1983 employed as a Generation Specialist in the Brunswick Plant Section of the Nuclear Operations Department, Southport, NC

2. August 1984 employed as a Maintenance Supervisor in the Brunswick Plant Section of the Brunswick Nuclear Project Department, Southport, NC

3. July 1985 employed as Director - Training (BSEP) in the Nuclear Training Section of the Operations Training and Technical Services Department, Southport, NC

4. October 1985 employed as Director - Training (BSEP) in the Nuclear Training Section of the Operations Training Department, Southport, NC

5. August 1986 reclassified to Manager - Training (BSEP) in the Nuclear Training Section of the Operations Training Department, Southport, NC

6. September 1986 employed as Manager - Training (BSEP), Nuclear Training Section, Operations Training and Technical Services Department, Southport, NC

7. December 1988 transferred to Operations Superintendent - Nuclear (Interim - In Training) in the Brunswick Plant Section, Brunswick Nuclear Project Department, Southport, NC

8. September 1989 reclassified as Technical Assistant to Plant General Manager in Brunswick Plant Section. Functions as alternate to Plant General Manager, directs Shift Managers, Operations Staff, Radwaste and Fire Protection

YEAR	COURSE DESCRIPTION	CONTACT CLASSROOM HOURS
1962	Submarine Missile Technician "A" School	1000
1963	Submarine Missile Technician "C" School	1200
1970	Poseiden Missile Advanced "B" School	500
1970	Instructor Training	150
1974	Submarine Tender-Weapons Officer	500

Fundamental Curriculum

Basic electricity/electronics; Advanced electronics; Radar special circuits; Solid state electronics; Pneumatic/hydraulic systems; Nuclear weapons principals; Principals of nuclear power; Radiological control procedures; Nuclear propulsion repair.

. . . . . .

Significant Military Assignments

Division Officer
Department Head
Nuclear Safety Officer
Nuclear Security Officer
Senior Watch Officer
Command Duty Officer
Professor of Naval Science

JWM1