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Vogle Project

May 2, 1985

Director of Nuclear Reactor Regulation
Attention: Ms. Elinor G. Adensam, Chief
Licensing Branch #4
Division of Licensing
U. S. Nuclear Regulation Commission
Washington, D.C. 20555

File: X3BC35
Log: GN-596

NRC DOCKET NUMBERS 50-424 AND 50-425
CONSTRUCTION PERMIT NUMBERS CPPR-108 AND CPPR-109
VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2
REQUEST FOR ADDITIONAL INFORMATION
FSAR CHAPTER 13 DRAFT SER OPEN ITEMS

Dear Mr. Denton:

Enclosed for your staff's review are changes to Chapter 13 and the procedure generation package which resulted from a teleconference with your staff on April 26, 1985. The Chapter 13 changes will appear in Amendment 17. Also included are resumes for the shift supervisors and the reactor engineer.

If your staff requires any additional information, please do not hesitate to contact me.

Sincerely,

J. A. Bailey
Project Licensing Manager

JAB/sw
Enclosure

xc: D. O. Foster
R. A. Thomas
J. E. Joiner, Esquire
B. W. Churchill, Esquire
B. Jones, Esquire w/o Encl.
T. Johnson w/o Encl.
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Project File

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TABLE 3.2.2-1 (SHEET 92 OF 97)

Principal System and Components	(a) Location		(b) Source of Supply	(c) Quality Group	(d) VEGP Safety Class	(e) Seismic Category	(f) Codes and Standards Designator	(g) Principal Construc- tion Code	(h) Q-list	(i) Safety Related	(j) Environ- mental Designator	(k) Comments
	Unit 1	Unit 2										
17. New fuel handling tool	FB	FB	W	NA	6	2	6	mfg	N	N		
18. Fuel transfer tube			W	B	2	1	2	III-MC	Y	Y		
19. Fuel transfer system			W	NA	6	2	6	mfg	<i>YY</i>	N		NOTE AB
20. New fuel elevator	FB	FB	W	NA	6	2	6	mfg	N	N		
21. Spent fuel cask bridge crane	FB	FB	B	NA	0	1	5	mfg	Y	Y		Note q

VEGP-PSAR-3

CLARIFICATION OF INFORMATION NEEDED ON DSER O.I. #98

(PROCEDURES GENERATION PACKAGE)

Item 1: Provide commitment to walk through procedures in Control Room, Plant, or Simulator.

Response: The VEGP EOPs will be walked through either in the Control Room, Simulator or Plant as appropriate.

Item 2: Reinsert the wording in the PGPs that dealt with intent and/or philosophy on use of procedures.

Response: The training job task analysis has identified this as an item to be taught to the operators. The wording mentioned above will be incorporated in the PGP.

PGP Clarifications

Item 3: Provide the proper wording concerning the evaluation of operators in classroom.

Revised wording will be incorporated in the PGP to address the testing and evaluation of Operations personnel.

Item 4: Provide information to the staff so they can determine how needed characteristics of instruments and control were determined by VEGP.

Response: VEGP will provide the process that was used to determine the characteristics of instruments and controls as requested in the NRC's letter (Adensam to Foster) dated 4-22-85. This information will be provided prior to fuel load.

CLARIFICATION OF INFORMATION NEEDED ON DSER O.I. #51

Provide training for the operators to distinguish the Smell of Toxic Chemicals and to don protective breathing apparatus per R.G. 1.78 C.3 and C15.

Response: VEGP will train Control Room Operators annually. Operators will be able to distinguish smell of toxic chemicals. This will be covered in the hazardous waste class for operators. In addition, Control room personnel will be able to don breathing apparatus in 2 minutes.

five team members each. Each fire team will have a designated fire team captain who will be in control of firefighting activities at the fire scene. The remaining four team members will be the designated rescue/firefighting team. In the event that the fire team captain is not present, the first brigade member to arrive on the scene will assume the responsibilities of the fire team captain until his arrival.

Each fire team captain will be a shift ^{Supervisor} foreman or some other qualified person designated by the ~~shift supervisor~~. ^{Operations Supervisor} Responsibilities of the fire team captain are described in the appropriate plant procedure.

Add
Insert

The remaining four members of each fire team will be comprised of shift personnel from the operations department and/or other departments within the plant. Their responsibilities are described in the appropriate plant procedure.

9.5.1.5.4 Responsibilities

The following are the responsibilities of the VEGP fire protection organization as related to the fire protection program.

A. Vice President and General Manager-Nuclear Generation

The vice president and general manager-nuclear generation has ultimate responsibility for the overall fire protection program at VEGP, including periodic assessment of the effectiveness of the VEGP fire protection program.

B. Plant Manager

The plant manager has overall management responsibility for the VEGP fire protection program. He is also responsible for developing and maintaining agreements with offsite fire departments.

C. Superintendent-Plant Engineering and Services

The superintendent-plant engineering and services has overall responsibility for administration of the VEGP fire protection program. The superintendent-plant engineering and services shall ensure that the required procedures for implementation of the fire protection program are current and in effect.

INSERT 1

Page 9.5.1-31

For each shift, the fire team captain and at least two of the other four members of the fire team will be shift personnel from the Operations Department with sufficient training in, or knowledge of, plant safety related systems to understand the effects of fire and fire suppressants on safe shutdown capabilities. The remaining two members of the fire team will be from the Operations Department and/or other departments. These fire team requirements conform to the guidelines of CMEB 9.5.1, Section C.3. These fire team manning requirements will be met without impacting the minimum on-shift operating staff requirements as described in the VEGP Technical Specifications.

The responsibilities for the members of the fire team are described in the appropriate plant procedures.

VEGP-FSAR-13

13.1.2 OPERATING ORGANIZATION

13.1.2.1 Plant Organization

The VEGP consists of two nearly identical nuclear generating units. The plant organization applicable when both units are operational is shown in figure 13.1.2-1. The plant staff, excluding the security department, will be manned with approximately 600 full-time employees.

13.1.2.2 Plant Personnel Responsibilities and Authorities

13.1.2.2.1 Overall Plant Management

The general manager-Vogtle nuclear operation (GMVNO) is responsible for direct management of the plant, including industrial relations, planning, coordination, direction of operation, training, maintenance, refueling, and technical activities. The GMVNO is responsible for compliance with the requirements of the operating license, technical specifications, and quality assurance program. In the GMVNO's absence, the deputy general manager assumes this responsibility. The GMVNO will designate in writing other qualified personnel to assume overall plant responsibility in his absence. (See paragraph 13.1.2.2.2 for succession of responsibility for overall plant operation.)

The GMVNO reports to the ~~manager-nuclear operation in the nuclear operation department. The manager-nuclear operation reports directly to the vice president and general~~ manager-nuclear operation. The GMVNO has access to the advice and services of technical specialists within Georgia Power Company (GPC), Southern Company Services (SCS) nuclear support, and outside expertise as necessary.

Reporting to the GMVNO directly and indirectly are the following selected positions:

- (along with the GMVNO)
- A. The deputy general manager, ~~along with the GMVNO, who~~ who is responsible for the overall operation and maintenance of the plant.
 - B. The manager-unit operations, who is responsible for the overall operation and maintenance of the plant.
 - C. The superintendent-operations, who is responsible for operating the plant safely and efficiently, and who reports to the manager-unit operations.

VECP-FSAR-13

Insert E →

- D. The superintendent-plant engineering and services, who is responsible for onsite engineering and technical support of the plant.
- F ~~E~~. The superintendent-maintenance, who is responsible for performance of preventive maintenance and repairs on plant equipment.
- G ~~F~~. The health physics superintendent, who directs chemical, radiochemical, and health physics activities, and who is responsible for the radiation protection program of the plant.
- H ~~G~~. The superintendent-regulatory compliance, who is responsible for advising plant management on matters concerning compliance with the Final Safety Analysis Report (FSAR), operating license, technical specifications, approved plant procedures, emergency plan, security plan, etc., and other applicable federal, state, and local regulations.
- I ~~H~~. The quality control supervisor, who is responsible for performance of work inspections, verification of procedures used in the control of special processes, and material equipment control of the plant. This supervisor reports to the Superintendent of Regulatory Compliance.
- J ~~I~~. The superintendent-administration, who is responsible for developing and implementing office practices which enable correspondence, document control activities, and other general office activities to be accomplished efficiently.
- K ~~J~~. The superintendent-nuclear training, who is responsible for the development and implementation of the training and retraining programs for the plant staff. The superintendent-nuclear training is also responsible for administering use of the training simulator.
- L ~~K~~. The materials supervisor, who is responsible for preparing requisitions for all operational spare parts, equipment, and miscellaneous supplies for plant use. The materials supervisor is also responsible for receiving, inspecting, shipping, storing, and maintaining an inventory of spare parts equipment and supplies.
- M ~~L~~. The procurement review section (PRS) site supervisor, who is responsible for ensuring that requisitions for parts, materials, and services specify the correct

INSERT "E"

The Superintendent of Engineering Liason^{who} has responsibility for coordinating construction and technical support activities in making plant modifications.

The procurement review section site supervisor reports directly to the superintendent of Engineering Services.

The PRS site supervisor is identified in figure 13.1.2-1 as a plant engineering supervisor.

procurement level (safety classification). For those requisitions considered safety related, the PRS site supervisor is responsible for ensuring that the appropriate technical and quality requirements are specified. The PRS site supervisor is also responsible for ensuring that documentation received with safety-related parts and materials is adequate. ^

The work experience and educational background requirements for department heads and selected personnel are described in subsection 13.1.3. The resumes of selected plant staff members are provided in table 13.1.2-1.

13.1.2.2.2 Operations Supervision and Shift Organization

The superintendent-operations is responsible to plant management for the operation of the two units of VEGP and shall possess a senior operators license. Each operations supervisor reports to the superintendent-operations. ^ Each operations supervisor shall possess a senior operators license.

THE SUPERINTENDENT-OPERATIONS AND

The operations supervisor is responsible for seeing that plant operations are conducted in accordance with appropriate standing orders, plant operating procedures, and technical specifications. The operations supervisor's principal responsibility is ensuring safe plant operation during his assigned shift as addressed in the requirements of item I.A.1.2 of NUREG-0737. ~~The operations supervisor shall possess a senior operators license.~~

Under the supervision of the operations supervisor, the shift supervisor shall assist the operations supervisor with his duties and responsibilities and shall possess a senior operators license. In addition, he keeps a record of shift activities and establishes unit load as directed by the load dispatcher or as emergency conditions dictate. Reporting to the operations supervisor or shift supervisor are the plant operators, assistant plant operators, and plant equipment operators.

The shift technical advisor reports functionally to the operations supervisor and acts to provide both perspective in assessment of plant conditions and evaluation of the safety of the plant. The shift technical advisor reports administratively to the senior shift technical advisor, who reports to the superintendent-operations. The shift technical advisor position meets the intent of NUREG-0660, as clarified by NUREG-0737, item I.A.1.1. The shift technical advisor position may be eliminated if the qualifications of the operations supervisor or shift

supervisor meet the requirements of the shift technical advisor position. Section 13.2 describes shift technical advisor training, and subsection 13.1.3 describes shift technical advisor qualifications.

Plant operators and assistant plant operators monitor the plant status and operate equipment as needed to maintain control of the various plant processes. Most of their duties are located in the control room, although they may perform inspections in other areas of the plant. The operating crew may make radiation and contamination surveys within the plant. (In addition to the control room personnel, ~~a health physics technician~~ ^{radiation chem} is on duty during plant operations.) The Technical Specifications state the shift manning requirements for all modes of operation.

The succession to responsibility for overall operation of the plant and the authority to issue operating instructions or special orders, in the event of absences, incapacitation of personnel, or other emergencies, shall be as follows:

- A. General manager-Vogtle nuclear operations (GMVNO).
- B. Deputy general manager
- C. Manager-unit operations.
- D. Superintendent-operations.
- E. Senior reactor operator-licensed superintendent as designated by GMVNO.
- F. Operations supervisor.
- G. Shift supervisor.

13.1.2.2.3 Engineering, Health Physics, Laboratory, and Maintenance Supervision

The superintendent-plant engineering and services reports to the initial test program manager and supervises the engineering staff. Reporting to him are the plant engineering supervisors and a fire protection specialist. (See subsection 9.5.1 for description of fire protection program.) The functions of his staff are to monitor plant performance, provide technical support for plant operation, provide writing support, and interface with other groups to ensure proper engineering support for plant operations. The plant engineering supervisors report

VEGP-FSAR-13

The positions reporting to the hot functional and startup test superintendent are the energization supervisor, startup test supervisor, hot functional test supervisor, and flushing supervisor.

- L. The startup test supervisor and hot functional test supervisor are responsible for conducting the assigned tests and for directing the individuals providing the support for the test activities.

These positions report to the hot functional and startup test superintendent. They will be supported by plant personnel, contractors, and other Southern system employees in completing their assignments.

- M. The flushing supervisor is responsible for the hot functional and startup test superintendent for the development and implementation of the flushing procedures and to coordinate the implementation of the flushing procedures in order to verify plant systems are cleaned to the cleanliness level specified.

The flushing supervisor reports to the hot functional and startup test superintendent.

The positions reporting to the flushing supervisor represent a matrix-type organization. Test supervisors will report to the flushing supervisor while their assigned systems are being flushed. Also reporting to him will be flushing support such as plant operations personnel, laboratory personnel, and flushing support crafts from construction.

- N. ~~The energization supervisor is responsible for energization of the plant electrical distribution in a safe and timely manner as needed to support the initial test program objectives and milestones.~~

~~The energization supervisor reports to the hot functional and startup test superintendent.~~

~~The energization supervisor coordinates electrical system construction acceptance tests and preoperational tests to support the initial test program, to minimize the use of temporary power, and to minimize power disruptions of the plant electrical distributions.~~

Add
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N AND O

INSERT N

SHIFT TEST DIRECTOR

The Shift Test Director (STD) is appointed by the ITPM to serve on a rotating basis with other individuals so appointed. The STD works for the Initial Test Manager and provides the daily control and prioritization of testing activities.

The STD has the authority and the responsibility to establish work priorities on a daily basis if needed to meet the goal and objectives of the test program.

The STD position is an expansion of the duties previously assigned to the energization Supervisor who's position has been deleted.

INSERT O

Test Review Board is responsible for reviewing/recommending selected Initial Test Program procedures for implementation, reviewing/recommending significant revisions to Initial Test Program procedures, and reviewing/recommending approval or results of Initial Test Program procedures.

The TRB consists of personnel from Georgia Power Company - Nuclear Operations, Bechtel Power Corporation, and Westinghouse Electric Corporation.

VEGP-FSAR-13

13.1.2.2.5.1 Qualification of Preoperational and Startup Personnel

A. Initial Test Program Manager and Program Superintendents

Individuals performing these functions shall meet the following requirements:

1. A bachelor's degree in engineering or related science.
2. Four years experience in responsible positions related to power generation, of which 3 years shall be nuclear power.

B. Lead Test Supervisors, and Preop and Startup Program Supervisors

Individuals performing any of these functions shall have as a minimum,

1. A bachelor's degree in engineering or related science and 3 years of power plant experience, including 2 years nuclear power plant experience, or
2. A high school graduate plus 7 years power plant experience, including 4 years nuclear power plant experience.

Insert 3

C. CAT and Flush Program Supervisors

Individuals who perform this function shall meet the following preoperational phase minimum requirements:

1. A high school diploma.
2. Four years experience in the craft or discipline he supervises, one year of which shall be nuclear power plant experience.

D. Test Supervisor (Preoperational Phase)

Individuals performing as test supervisors during the preoperational phase shall satisfy the following minimum requirements:

1. Bachelor's degree in engineering or related science, and

2. One year of power plant experience, or

Insert 3 ~~A high school graduate plus 5 years of power plant experience~~ including 2 years of nuclear power plant experience.

E. Test Supervisor (Startup Phase)

Individuals performing as test supervisors during the startup phase shall satisfy the following minimum requirements:

1. Bachelor's degree in engineering or related science, and
2. Two years of power plant experience, of which 1 year shall be nuclear plant experience, or

Insert 3 A high school graduate plus 6 years of power plant ~~experience~~ including 3 years of nuclear power plant experience.

Insert "F" 13.1.2.2.5.1.1 Special Considerations. Individuals who do not possess the formal education requirements specified in paragraph 13.1.2.2.5.1 shall not be automatically eliminated where other factors provide sufficient demonstration of their abilities. The initial test program manager shall evaluate these persons on a case-by-case basis and provide documentation of this evaluation in the qualification records.

Completion of formal education beyond the minimum requirements and formal and on-the-job training may be used by the initial test program manager as partial satisfaction of experience requirements, utilizing the guidance of ANSI N18.1-1971, Selection and Training of Nuclear Power Plant Personnel.

13.1.2.3 Operating Shift Crews

A total manpower in excess of five full shift crews is provided to avoid excessive overtime. The minimum number of operation supervisor, shift supervisors, plant operators, assistant plant operators, equipment operators, and shift technical advisors are shown in table 13.1.2-2. Figures 13.2.1-2 and 13.2.2-1 indicate the schedule for senior reactor operator (SRO) and reactor operators (RO) training to meet the minimum shift staffing and other plant positions.

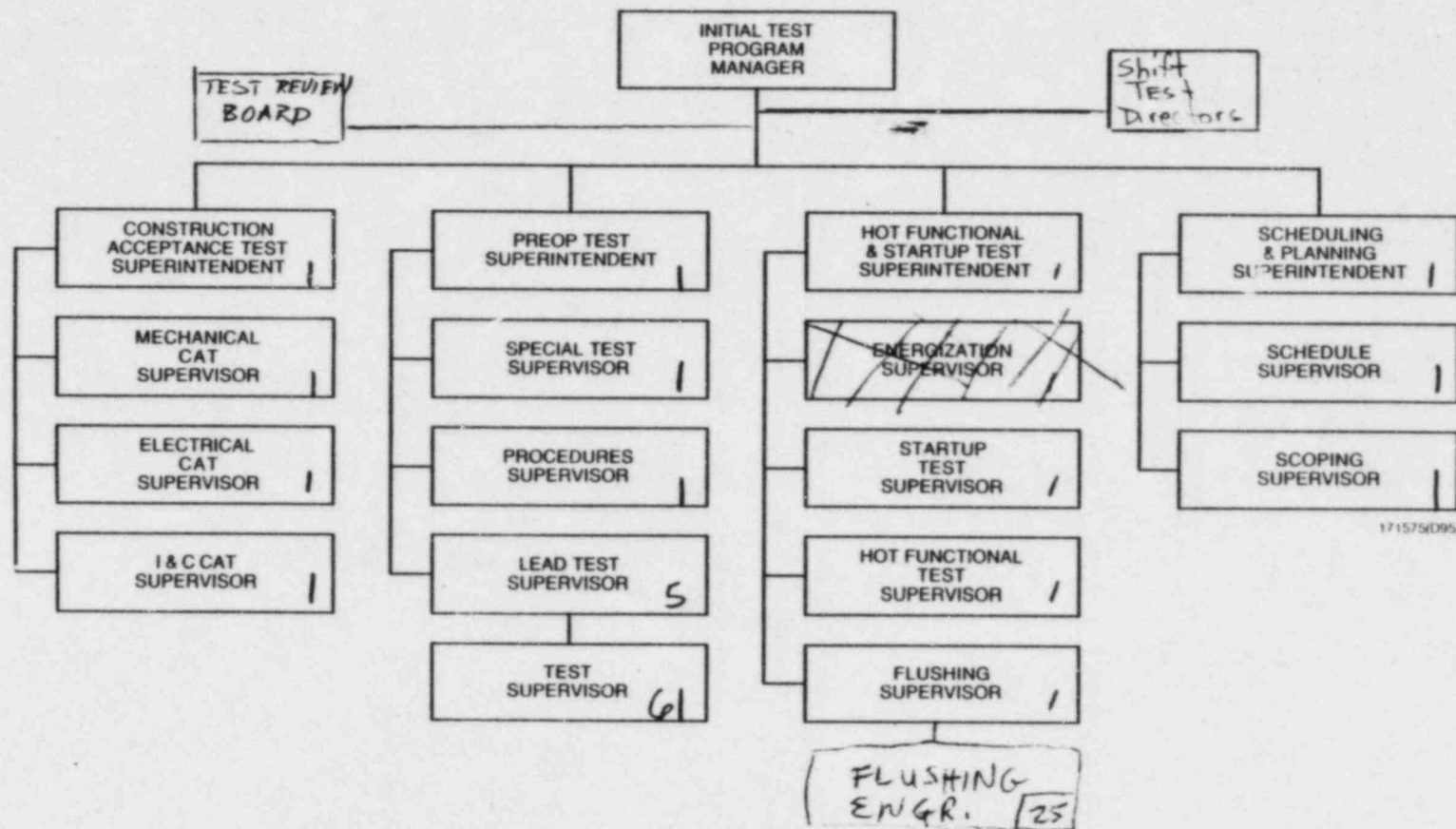
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(experience acquired in the testing, operation, or maintenance of power generating facilities)

INSERT "F"

F. Members of the Test Review Board shall meet one of the following requirements:

- 1 - A bachelors degree in Engineering or related science and three years of power plant experience, including two years nuclear power plant experience, or
- 2 - Be a representative of a responsible engineering (design) organization who is knowledgeable of the system and equipment design and performance requirements.



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Amend. 15 3/85

Georgia Power

VOGTLE
ELECTRIC GENERATING PLANT
UNIT 1 AND UNIT 2

PREOPERATION AND STARTUP
ORGANIZATION

FIGURE 13.1.2-2

13.1.3 QUALIFICATIONS OF PERSONNEL

13.1.3.1 Qualifications Requirements

American National Standards Institute (ANSI) N18.1-1971, Standard for Selection and Training for Nuclear Power Plants, is currently used as a basis for establishing the qualifications for personnel in the plant organization. Personnel will either meet the minimum education and experience recommendations of ANSI 18.1-1971 or will complete a qualification program which will demonstrate their ability to perform their job functions.

commensurate with their level of responsibility

Table 13.1.3-1 with designated ANSI N18.1 equivalent titles, states the requirements for work experience and educational background for key plant personnel.

The following definitions will be used for qualification of personnel.

13.1.3.2 Definitions

Nuclear power plant - A nuclear power plant is any plant using a nuclear reactor to produce electric power, process steam, or space heating.

Experience - Experience is actual applicable working experience in design, construction, startup, operation, maintenance, or technical services.

Academic training - Academic training is successfully completed college level work leading to a recognized degree.

Related technical training - Related technical training is formal training beyond the high school level in technical subjects associated with the position in question, acquired in training schools or programs conducted by the military, industry, utilities, universities, vocational schools, or others.

On-the-job training - On-the-job training is participation in nuclear power plant startup, operation, maintenance, or technical services under the direction of appropriately experienced personnel.

TABLE 13.1.3-1 (SHEET 2 OF 2) (FIRST HALF)

ANSI N18.1 Title	VEGP Title	Recommended Experience (years)					License	
		Total Power Plant	Nuclear Power Plant	Other Applicable	Academic Training		Reactor Operator	Senior Reactor Operator
Instrumentation and control	I and C foreman			5				
Professional - technical	Plant engineer (reactor engineer)			2	4(d)			
	Shift technical advisor				4(d)			
Operators to be NRC licensed	Plant operator	2	1				X	
	Assistant plant operator	2	1				X	
Technicians	I and C technicians			2				
	Laboratory technician			2				
Repairmen	Mechanic			3				
	Electrician			3				
Technical support personnel								
Engineer-in-charge	Plant engineering supervisor			3	4			
Other personnel	Other personnel							

a. Senior reactor operator license is not required for plant manager, but he or the assistant will have the background required to sit for examination.

b. Required by NUREG-0737.

c. Shift technical advisor training certified by GPC. See paragraph 13.2.2.1.5 for shift technical advisor training.

d. ~~Shift technical advisors and reactor engineers shall have four years of academic training.~~

A bachelor of engineering or related sciences degree.

VEGP-FSAR-13

16

Amend. 16 4/85

13.1.3.3 Qualification of Plant Personnel

Nuclear power plant experience will be that nuclear experience acquired in the design, construction, startup, or operation of nuclear power plants. Further, nuclear experience acquired at military, nonstationary, or propulsion nuclear plants may qualify as equivalent experience on a one-for-one time basis.

Nuclear experience acquired in nonpower plants such as test, research, or production reactors may qualify as equivalent to nuclear power plant experience on a one-for-one time basis. *Insert 1*

Training may qualify as experience if acquired in appropriate reactor simulator training programs on the basis of 1 month's training being equivalent to 3 month's experience. *Insert 1*

Training programs, the culmination of which involves actual reactor operation, may qualify as equivalent to nuclear power plant experience on a one-for-one time basis. *Insert 1*

On-the-job training may qualify as equivalent to nuclear power plant experience on a one-for-one time basis. *Insert 1*

The qualification of the initial staff personnel holding key managerial and supervisory positions as described in paragraph 13.1.2.2.1 are provided in table 13.1.3-1.

Insert 1

Only one year of such experience will be accredited toward the total nuclear experience qualification

13.4 OPERATIONAL REVIEW

Operating activities that affect nuclear safety are reviewed. The review program is implemented prior to initial fuel loading and ensures review and evaluation of tests and experiments, unplanned events, and proposed change. The program complies within the requirements of 10 CFR 50.54 relating to proposed changes, tests, and experiments. This program is conducted following the recommendations of Regulatory Guide 1.33, Rev.2 1978, Quality Assurance Program Requirements (Operations), and ANSI N18.7-1976, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants.

The general manager - Vogtle nuclear operations (GMVNO) has responsibility for safe operation of the plant. He is kept abreast of plant operating conditions by the supervisors who are knowledgeable and experienced in their areas of job responsibility. The supervisors monitor operating and maintenance activities as part of their normal duties.

In addition, a formal review program is carried out for changes to systems, procedures, tests, experiments, and after-the-fact review and evaluation of unplanned events that affect nuclear safety. This program is implemented through standing committees, as described below.

13.4.1 ONSITE REVIEW

The plant review board (PRB) serves as a review and advisory group to the GMVNO. The PRB reviews plant administration, maintenance, and operations as related to nuclear safety and environmental aspects; ensures these activities are consistent with company policy-approved procedures and operating license provisions; and makes recommendations to the GMVNO on matters brought before it.

individual from the The PRB is composed of, as a minimum, ~~one member of the plant staff from these disciplinary groups~~ *a supervisor or equally qualified* listed below: *The qualification*

- Operations.
- Maintenance.
- Quality Control (QC).
- Health Physics or Chemistry.
- Regulatory Compliance.
- Plant Engineering and Services.

of supervisors is as indicated in Table 13.1.3-1.

VEGP-FSAR-13

Collectively, these members possess the type and degree of expertise required to review unplanned events and proposed changes to systems, procedures, tests, and experiments that affect nuclear safety. The chairman and vice chairman of the PRB are designated by the GMVNO. The minimum quorum of the PRB will consist of the PRB chairman or vice chairman and four members. The PRB meets at least once per calendar month.

The PRB is specifically responsible for the following:

A. Review of:

1. Procedures that establish plantwide administrative controls to implement the quality assurance program or technical specification surveillance program.
2. Procedures for changing plant operating modes.
3. Emergency and abnormal operating procedures.
4. Procedures for effluent releases of radiological consequence.
5. Fuel handling procedures.

B. Review of:

1. Program required by Technical Specifications.
2. Proposed procedures and changes to procedures, equipment, or systems that involve an unreviewed safety question as per 10 CFR 50.59.

C. Review of proposed tests and experiments that involve an unreviewed safety question. *affect nuclear safety*

D. Review of proposed changes to the Technical Specifications.

E. Review of the report of the investigation of violations of the technical specification that covers evaluation and recommendations to prevent recurrence.

F. Review of all reportable events.

G. Review evaluations of plant operations to detect potential nuclear safety hazards.

H. Performance of special reviews, investigations, or analyses and reports thereon as requested by the GMVNO or the Safety Review Board.

VEGP-FSAR-13

- I. Review of the Security Plan and implementing procedures and submittal of recommended changes to the GMVNO.
- J. Review of the Emergency Plan and implementing procedures and submittal of recommended changes to the GMVNO.
- K. Review of any accidental, unplanned, or uncontrolled radioactive release in excess of 1 Ci, excluding dissolved and entrained gases and tritium for liquid effluents, and in excess of 150 Ci for noble gases or 0.02 Ci of radioiodines for gaseous effluents.

The PRB's authority is as indicated below:

- A. Recommend in writing to the GMVNO approval or disapproval of items A through D above.
- B. Render determinations in writing with regard to whether or not each item A through E above constitutes an unreviewed safety question.
- C. Provide written notification within 24 h to the vice president and general manager of nuclear operations and the Safety Review Board of the disagreement between the PRB and the GMVNO; however, the GMVNO shall have responsibility for resolution of such disagreements.

The PRB will maintain written minutes of each meeting that, at a minimum, document the results of the PRB activities. Further details of the activities and duties of the PRB are described in plant procedures.

Copies of these minutes will be provided to the Vice President and General Manager - Nuclear Operations and the Safety Review Board.

13.4.2 INDEPENDENT REVIEW

The Safety Review Board (SRB) provides an independent review and audit of designated activities in the following areas:

- o Nuclear power plant operations.
- o Nuclear engineering.
- o Chemistry and radiochemistry.
- o Metallurgy.
- o Instrumentation and control.
- o Radiological safety.
- o Mechanical and electrical engineering.
- o Quality assurance practices.

Insert →

~~13.4.2~~

Specifically, the SRB will review:

The members of the SRB as a minimum shall have a bachelor degree in engineering or related sciences and five years of professional level experience in their field of specialty.

- A. The safety evaluations for changes to procedures, equipment, or systems, and tests or experiments completed under the provisions of 10 CFR 50.59 to verify that such actions did not constitute an unreviewed safety question.
- B. Proposed changes to procedures, equipment, or systems which involve an unreviewed safety question as defined in 10 CFR 50.59.
- C. Proposed tests or experiments which involve an unreviewed safety question as defined in 10 CFR 50.59.
- D. Proposed changes to technical specifications or operating license.
- E. Violations of codes, regulations, orders, technical specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.
- F. Significant operating abnormalities or deviations from normal and expected performance of plant equipment that affect nuclear safety.
- G. The results of the PRB's review of all reportable events.

VEGP-FSAR-13

- H. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
- I. Reports and meeting minutes of the PRB.

In addition, periodic audits of plant activities will be performed under the cognizance of the SRB to evaluate:

- A. The conformance of plant operations to provisions contained within the Technical Specifications and applicable license conditions. (at least once per 12 months)
- B. The performance, training, and qualification of the plant staff (at least once per 12 months)
- C. The results of actions taken to correct deficiencies occurring in plant equipment, structures, systems, or method of operation that affect nuclear safety (at least once per 6 months).
- D. The performance of activities required by the Quality Assurance program (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 Fire Protection Program and implementing procedures. (at least once per 24 months)
- H. Any other area of plant operation considered appropriate by the SRB or the executive vice president - power supply.

The SRB will report to and advise the executive vice president - power supply on matters related to their responsibilities.

The SRB will be composed of a minimum of seven persons who, as a group, provide the expertise to review and audit the operation of a nuclear power plant. The chairman and vice chairman and other members shall be appointed by the executive vice president - power supply or other such person as he may designate. No more than a minority of the SRB will be members of the onsite operating organization. All alternates will be appointed in writing by the absent member to serve on a temporary basis. However, no more than two alternates will participate in SRB activities at any one time. Consultants may be used at the discretion of the chairman or vice chairman to provide expert advice to the SRB.

VEGP-FSAR-13

The minimum quorum of the SRB necessary for the performance of SRB review and audit functions consists of the SRB chairman or vice chairman and at least three SRB members. No more than a minority of the quorum will have line responsibility for operation of the plant.

Reports of SRB activities will be prepared, approved, and distributed as described below:

- A. Minutes of SRB activities will be prepared and submitted to ~~management~~ within 14 days following a meeting. ^{Executive Vice President - Power Supply}
- B. Reports of certain reviews will normally be submitted to management within 14 days following completion and SRB approval of the review.
- C. Audit reports will normally be submitted to management within 30 days following completion and SRB approval.

13.5 PLANT PROCEDURES

This section describes administrative, maintenance, and operating procedures that will be used by the operating organization to ensure that routine, off-normal, and emergency activities are conducted in a safe manner. Operations affecting safety will be conducted in accordance with detailed written and approved procedures.

1.5.1 ADMINISTRATIVE PROCEDURES

Administrative procedures provide rules, instructions, policies, practices, or guidelines for the plant staff. They will be completed at least 6 months prior to Unit 1 initial fuel loading.

13.5.1.1 Administrative Procedure Descriptions

A. Procedures for Preparation, Review, and Control of Procedures

These procedures establish the controls for the preparation, review, and control of all plant procedures. Included within these procedures are provisions to ensure that new or revised procedures are reviewed for adequacy by appropriately qualified personnel and approved for release by authorized personnel. The general manager - Vogtle nuclear operations has ultimate responsibility for all plant procedures; however, a provision is made to establish department heads as the approving authority for those procedures covering activities within their area of responsibility. Provisions exist to ensure that changes or revisions to procedures are reviewed and approved in accordance with the same administrative controls used for review and approval of new procedures. A provision is made to ensure that plant procedures are reviewed at least every 2 years by a knowledgeable individual to determine whether changes are necessary or desirable. Other provisions ensure that procedures, once approved, are distributed appropriately so that only the most current procedures are used by plant personnel.

B. Procedures for Making Temporary Changes to Procedures

This procedure provides the method for making a temporary change to an approved plant procedure.

See
Insert
13.5.1.1

ADMINISTRATIVE PROCEDURE DESCRIPTIONS

Insert 13.5.1.1

A. Procedures for Preparation, Review, and Control of Procedures

These procedures establish the controls for the preparation, review, and control of ~~the~~ plant procedures *which cover activities as described in Appendix A of Regulatory Guide 1.33, Rev. 2.*

Included within these procedures are provisions to ensure that new or revised procedures are reviewed for adequacy by appropriately qualified personnel other than the originator. In accordance with these procedures, a reviewer shall establish knowledge of the applicable requirements for a procedure and shall verify the proper incorporation of these requirements in the procedure; additionally, a reviewer shall assess whether the procedure or procedure revision potentially involves a change in the VEGP Technical Specifications or an unreviewed safety question. The acceptability of procedure reviews is assured by the review and approval of the review by the responsible VEGP Nuclear Operations department heads; the experience and education on an individual basis that qualifies department heads to perform this approval of procedure reviews is delineated in FSAR Table 13.1.2-1 "Resumes of Onsite Supervisory Personnel." Nuclear Operations department heads shall further ensure that procedures described in FSAR Section 13.4.1 are forwarded to the Plant Review Board (PRB) for additional review.

The General Manager - Vogtle Nuclear Operations (GMVNO) has ultimate responsibility for all plant procedures. Provisions of these procedures establish the GMVNO as the approving authority for procedures which establish plant wide administrative controls (which implement the Quality Assurance Program and the Technical Specifications Surveillance Program), for Unit Operating Procedures (UOP's), Emergency Operating Procedures (EOP's), Abnormal Operating Procedures (AOP's), procedures for implementing the Security Plan, the Emergency Plan, and the Fire Protection Program, and Fuel Handling Procedures. Nuclear Operations department heads are established as the approving authority for other procedures covering activities within their area of responsibility.

Additional provisions of these procedures exist to ensure that changes or revisions to procedures are reviewed and approved in accordance with the same administrative controls used for review and approval of new procedures. A provision is made to ensure that plant procedures are reviewed at least every 2 years by a knowledgeable individual to determine whether changes are necessary or desirable. Also provisions exist to ensure that procedures, once approved, are distributed appropriately so that only the most current procedures are used by plant personnel.

Controls for the preparation, review and approval of Initial Test Program Procedures are described in FSAR Section 14.2.2.

Included in this procedure is a provision to ensure that any such change be approved by at least two knowledgeable members of the plant staff, one of whom shall be the on-duty operations supervisor in charge of the shift. Also included in this procedure is a provision to ensure that temporary changes to procedures are documented and incorporated as appropriate into the next revision of the procedure.

C. Procedures for Feedback of Operating Experience

These procedures include measures to ensure that pertinent operating experience information that originates from both within and outside of the plant organization is feedback to operators and other appropriate personnel in accordance with NUREG-0737, item I.C.5. Included is the identification of organizational responsibilities for reviewing and prioritizing operating experience, and for ensuring distribution of pertinent information to the appropriate plant personnel. Steps exist to ensure that information is reviewed by individuals of appropriate technical knowledge and that appropriate corrective actions (such as procedure or program revisions) if needed are specified. Additional steps ensure that plant personnel do not routinely receive a large volume of operating experience that might obscure the lessons to be learned from more significant events, and also that the program receives periodic evaluation for effectiveness.

Add
Insert
"C"

D. Procedures for Control Room Access

These procedures give the shift supervisor authority to limit access to the control room to those individuals responsible for the direct operation or support of the plant. Included are steps that direct personnel other than the onshift operations crew and the operations chain of command to request permission of the shift supervisor to enter the limited access area shown in figure 13.5.1-1. Also, these procedures establish good-conduct rules for personnel within the control room area to avoid any disruption of operating activity. In addition to the shift supervisor, the onshift operations supervisor or the superintendent of operations may give permission to enter the limited access area; however, responsibility for limiting control room access shall be a normal shift duty of the shift supervisor. These procedures address the requirements of NUREG-0737, item I.C.4, for control room

Add Insert D

INSERT "C"

INSERT 13.5.1.C

C. Procedures for Feedback of Operating Experience

These procedures include measures to ensure that pertinent operating experience information (such as industry event reports, vendor reports, in-house event reports and NRC publications) that originates from both within and outside of the plant organization is feedback to operators and other appropriate personnel in accordance with NUREG-0737, item I.C.5. As established by these procedures, the Superintendent of Regulatory Compliance will have overall responsibility for direction, control and administration of the Operations Assessment Program. Included in these procedures is the identification of organizational responsibilities for reviewing and prioritizing operating experience, and for ensuring distribution of pertinent information to the appropriate plant personnel. Steps exist to ensure that information is reviewed by individuals of appropriate technical knowledge and that appropriate corrective actions (such as procedure or program revisions) if needed are specified. The procedures include steps which ensure records are maintained to reflect the status and disposition of operating experience evaluations and their associated corrective actions. Completion status and follow-up verification status of completed action is tracked to ensure implementation. Additional steps ensure that plant personnel do not routinely receive a large volume of operating experience that might obscure the lessons to be learned from more significant events, and also that the program receives periodic evaluation for effectiveness.

INSERT "D"

The Shift Supervisor is additionally given the authority to require that any individual who has been granted access to the Control Room immediately leave the control Room if that individual interferes with the duties of the Control Room Operators in maintaining safe operation of the plant or exhibits behavior contrary to good conduct rules.

VEGP-FSAR-13

access; while the requirements for establishing the lines of authority, responsibility, and succession in the control room are addressed by the procedures described in section E.

E. Procedures for Operating Duties, Responsibilities, and Authority

These procedures clearly describe the duties, responsibilities, and authority for the control room personnel, which include the onshift operations supervisor, the shift supervisor, the plant operator, the assistant plant operator, and the shift technical advisor. The command line of authority for these personnel is established by these procedures. Specifically, the onshift operations supervisor is established as the senior operations representative on each shift and shall have responsibility for the safe and efficient operation of the plant. The shift supervisor is established as having responsibility for the safe and efficient operation of his assigned unit, since a shift supervisor is assigned to each operating unit on each shift. Included in these procedures are provisions for the onshift operations supervisor to maintain a broad perspective of operational conditions affecting the safety of the plant at all times and provisions for him not to become totally involved in any single operation during plant transients or emergency conditions. Other provisions establish the onshift operations supervisor as having the authority and responsibility to declare emergencies and for functioning as the emergency director until being relieved of this responsibility by a higher ranking qualified manager.

Provisions for ensuring that the onshift operations supervisor is not routinely performing administrative functions that could detract from or that are subordinate to his command function and his responsibility for ensuring the safe operation of the plant are exemplified by the following:

1. An operations supervisor who is not on shift shall prepare work and vacation schedules.
2. The shift supervisor shall issue clearances for equipment within his assigned unit.
3. The shift supervisor shall have the administrative duty of limiting access to the control room.

The general manager Vogtle Nuclear operations (GMVNO) shall annually review the administrative duties of the onshift operations supervisor to ensure that he is not routinely performing administrative duties as described above.

13.5.1-3 Amend. 16 4/85

VEGP-FSAR-13

The procedures described in this section are in accordance with requirements of NUREG-0737, item I.A.1.2, item I.C.3, and item I.C.4. The process for handling standing orders is addressed in section F.

F. Procedures for Standing Orders

These procedures provide for the issue of temporary instructions to plant operating personnel to address subjects not covered by existing plant operating procedures. Included in these procedures are provisions for maintaining and implementing approved standing orders, periodically reviewing standing orders for continued applicability, and ensuring that standing orders are not maintained over 1 year before deletion or conversion into a plant operating procedure.

G. Procedures for Shift Manning and Overtime Restrictions

These procedures establish the normal and minimum shift positions that must be manned for operation of the plant. Included is the number of individuals to fill these normal and minimum positions for both one-unit and two-unit operation. These procedures restrict the use of overtime that may be scheduled to meet the shift crew staffing requirements, such that overtime use does not exceed the guidance provided in NUREG-0737, item I.A.1.3, as revised by NRC Generic Letter 82-12.

~~Additional provisions are made to ensure that the use of any overtime that would exceed the restrictions of Generic Letter 82-12 must be authorized by the general manager. Vogtle nuclear operations or the manager of unit operations; an evaluation of the excess overtime request will be documented.~~

H. Procedures for Shift Relief and Turnover

These procedures ensure that a comprehensive exchange of information takes place between the oncoming and offgoing shift personnel so that the oncoming shift is aware of critical plant status information and system availability prior to assuming duty. Included are provisions to ensure that each oncoming individual reviews the logs, round sheets, and checklists that are applicable to his position and that he discusses important items affecting plant operation with the offgoing individual. Provisions also include ensuring that an individual is qualified for the position that he will assume. These procedures establish as part of

Add
Insert
Item G

INSERT

Item G: Procedures for Shift Manning and Overtime Restrictions

These procedures shall limit the working hours of the plant staff who perform safety-related functions; e.g., ^{CHEM/RAD.} licensed Senior Reactor Operators, licensed Reactor Operators, ~~Health Physics~~ Technicians, Auxiliary Operators and key Maintenance personnel. These procedures shall provide for maintaining adequate shift coverage without routine heavy use of overtime. The objective shall be to have operating personnel work a 40-hour week while the plant is operating; although this work week may normally consist of 12-hour shift schedules. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance or major plant modification, on a temporary basis these procedures shall provide for the following guidelines to be followed:

- 1) An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;
- 2) An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time;
- 3) A break of at least 8 hours should be allowed between work periods, including shift turnover time; and
- 4) Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

These procedures shall require that use of overtime that would exceed the above stated guidelines be authorized by the Manager of Unit Operations or the Superintendent of Operations, with the basis for granting the exception being documented. Controls shall be included in these procedures such that individual excess overtime shall be reviewed monthly by the General Manager Vogtle Nuclear Operations.

VEGP-FSAR-13

the offgoing control room operator responsibility the need to ensure that his relief is fully aware of existing plant conditions and is alert, coherent, and fully capable of performing his assigned duties. These procedures are in accordance with the requirements of NUREG-0737, item I.C.2.

I. Equipment Control Procedures

These procedures provide instructions for releasing plant equipment or systems for maintenance, testing, or inspection; they establish the shift supervisor as the responsible authority for issuing and releasing clearances for equipment to be taken out of service within his assigned unit. The provisions of these procedures include steps to ensure that equipment taken out of service and placed in a controlled status is clearly identified by the use of tagging. Other provisions provide for a second qualified person verifying the isolation or restoration of a safety-related component or system, including proper realignment unless functional testing can be performed to prove the correct realignment of all equipment, valves, and switches involved. In cases of significant radiation exposure, a second verification of safety-related system alignment will not be made. Additional provisions are made to maintain the status of equipment and to determine the operability of equipment upon return to service; on return to service a system lineup verification will be made and additional lineup verifications may be made at periodic intervals while in service. These procedures address the requirements of NUREG-0737, item I.C.6 and item II.K.1.10, and the requirements of ANSI N1817-1976, Section 5:2.6, relative to equipment control.

N18.7

J. Maintenance and Modification Administrative Control Procedures

Maintenance of equipment and plant modifications important to plant safety are performed in accordance with written procedures as described in paragraph 13.5.2.2. Administrative controls are provided to ensure compliance with applicable codes, regulations, and requirements.

K. Fire Protection Procedures

The VEGP fire protection program is governed and implemented through the use of fire protection

RESUME

NAME: Ronald L. (Ron) LeGrand
DATE OF BIRTH: November 26, 1952
DATE EMPLOYED: December 12, 1981
TITLE: Shift Supervisor (SRO)
EDUCATION: Bachelor of Science
University of South Carolina, 1981
LICENSE/CERTIFICATIONS: ANSI Qualified Senior Health Physics
LICENSED AT FARLEY NUCLEAR PLANT

WORK EXPERIENCE:

SUMMARY

26 months power plant experience
26 months nuclear power plant experience

NUCLEAR (GPC)

Position: Shift Foreman
Dates: 12/5/83 - Present
Location: Plant Vogtle, Burke Co., GA
Plant Status: Under Construction & Startup
Job Description: SRO Training, Material Coordinator
for Startup. Presently assigned to
~~FARLEY NUCLEAR PLANT: LICENSED AT FARLEY~~

Position: Lab Foreman
Dates: 3/83 - 11/83
Location: Plant Hatch
Plant Status: Commercial Operation
Job Description: Responsible for personnel in
Chemistry and Health Physics.
Directly responsible for
dosimetry upgrade and continuing
operation.

Position: Chem-Rad Technician
Dates: 12/81 - 3/83
Location: Plant Hatch
Plant Status: Commercial Operation
Job Description: In charge of all radwaste
shipping and handling. Responsible
for surveys of rad and contaminated
areas. Coordination of groups
working in areas.

NON-NUCLEAR (OTHER)

Position: Laborer
Dates: 5/12/80 - 7/11/80
Location: Harrington Industries
Aiken, S. C.
Plant Status:
Job Description: Re-upholstering and painting of
air craft.

NON-NUCLEAR (OTHER)
CONT'D

Position:	Chemical Mixer
Dates:	2/78 - 12/78
Location:	Graniteville Company
Plant Status:	
Job Description:	Mixed chemicals for textile application.
Position:	Research Lab Technician
Dates:	3/77 - 2/78
Location:	Graniteville Company
Plant Status:	
Job Description:	Research New Product Development
Position:	Sales Representative
Dates:	3/76 - 3/77
Location:	National Comp Associates Lone Star Life Ins. Co.
Plant Status:	N/A
Job Description:	Selling Accident & Health Insurance
Position:	Supervisor of Operations-
Dates:	5/73 - 3/76
Location:	South Carolina National Bank
Plant Status:	N/A
Job Description:	Manager of personnel in department.
Position:	Assistant Manager
Dates:	9/69 - 12/71
Location:	Village Pharmacy
Plant Status:	N/A
Job Description:	General helper.

TRAINING

NUCLEAR

Course Title:	NRRT
Dates:	
Total Course Hrs.	80
Vendor:	General Physics
Description:	Course preparation for taking NRRT exam.
Course Title:	Health Physics
Dates:	6-82
Total Course Hrs.	240
Vendor:	General Physics
Description:	Health Physics Fundamentals and advanced H.P.

TRAINING

NUCLEAR (CONT'D)

Course Title: Chemistry
Dates: 5-82
Total Course Hrs. 240
Vendor: General Physics
Description: Chemistry fundamentals
and advanced chemistry

Course Title: BWR Technology
Dates: 4-82
Total Course Hrs. 40
Vendor: GPC
Description: BWR technology

Course Title: BOP Training
Dates: 4-82
Total Course Hrs. 40
Vendor: GPC
Description: BOP technology

TRAINING

OTHER

Course Title: Chemical Engineering
Dates: 11/82 - Present
Total Course Hrs:
Vendor: ICS
Description: Chemical engineering technology

RESUME

NAME: Michael J. Rowe
TITLE: ~~Associate Engineer~~ *Shift Supv. (SR0) (CERT)*
DEGREE: B.S. in Nuclear Engineering
DATE OF BIRTH: November 11, 1954
DATE OF EMPLOYMENT: August 31, 1981
LICENSE: *SR0 LICENSED AT V.C. Summer*
WORK EXPERIENCE:

NUCLEAR (GPC)

*SHIFT SUPERVISOR
FEB. 85 - Present
Assigned to V.C. Summer
performing on shift
operating duties*

*SHIFT TECHNICAL ADVISOR
Feb 84 - Feb. 85
Assigned to V.C. Summer
for hot participation
experience and training.
Performed on shift operating
duties.*

Position: Associate Engineer
Dates: 8/31/81 to Present
Location: VEGP
Plant Status: Construction - Unit 1
10% Unit 2
Job Description: Operations Department,
Emergency and Abnormal
Operating Procedures.

Position: Jr. Engineer
Dates: 1/04/82 to 4/23/82
Location: HNP
Plant Status: Operation of 2 units
Job Description: Qualified new fuel
inspector for GE
supplied fuel and
outage support
including activities
in: core discharge,
core reload, new fuel
inspection, fuel
reconstitution, fuel
sipping and general
outage support.

NUCLEAR (OTHER)

Position: Vice President RTS
Laboratories, Inc.
Dates: 3/80 to 3/81
Location: Gainesville, Florida
Plant Status:
Job Description: Coordination of
Contract Effort,
Research Director

Position: Engineer I,
University of Florida
Dates: 3/79 to 3/80
Location: Gainesville, Florida
Plant Status:
Job Description: Group Coordinator and
Chief Engineer for
contracts/grants in
the Department of
Nuclear Engineering,
Phononics Group.

Position: Consultant
Dates: 3/79 to 8/81
Location: Gainesville, Florida
Plant Status:
Job Description: Various consulting for
NSWC, NASA, DOE, U of
FL.

NON-NUCLEAR (GPC)

None

NON-NUCLEAR (OTHER)

Position: President, SARACO, Inc.
Dates: 11/79 to 8/81
Location: Gainesville, Florida
Plant Status:
Job Description: Operation and develop-
ment of Aviation
Corporation.

TRAINING:

NUCLEAR

Course Title: Operation Technology
Training (OTT)
Dates: 8/30/82 to 12/23/82
Vendor: General Physics
Description: A 16 week course on
Theory and Systems
specific to VEGP.

Course Title: Simulator Training
Dates: 1/04/83 to 3/18/83
Total Course Hrs.: 240
Vendor: General Physics
Description: A 6 week simulator
course on the VEGP
Simulator.

Course Title: PWR Class
Dates: 9/81
Total Course Hrs.: 40
Vendor: General Physics
Description: Introduction to
Pressurized Water
Reactors with a VEGP
systems description.

Course Title: Reactor Operations
Second Person/
Qualifications (1977)
Dates:
Total Course Hrs.: 80
Vendor: University of Florida
Description: Qualification of the
second person on the
UFTR - 100KW Reactor.

Course Title: Graduate School
Dates: 1/79 to 6/81
Total Course Hrs.: 35 credit hours
Vendor: University of Florida
Description: Graduate School in
Engineering with a
major in physics.

NON-NUCLEAR

Course Title: Problem Solving Class
Dates: 6/28/82 to 6/30/82
Total Course Hrs.: 24
Description: Techniques for solving
job related problems.

OTHER

(Applicable to
Power Production)

Related Publications (of 14)
"Coal Burning Issues" - Co author with
A. E. Green
"Nuclear Pumped Lasers" - Co author R. T.
Schneider, F. Holh
"Coal Gasification" - Author for
Research Proposal,
RTS Labs

RELATED EXPERIENCE:

Position: Research Assistant
Dates: 6/75 to 3/79

Location:

Plant Status:

Job Description:

R/D in the nuclear
field including
working radiation
environments -
military and civilian
facilities.
4 years

RESUME

NAME: Robert E. Dorman
 DATE OF BIRTH: August 25, 1957
 DATE EMPLOYED: June 29, 1957
 TITLE: Shift ^{Supr. (SRO)} Technical Advisor
 EDUCATION: Bachelor of Science In Mechanical Engineering
 University of Florida

LICENSE/CERTIFICATIONS: Certified Technical Advisor at Plant E. I. Hatch
 from 1-1-83 to 12-3-83
 SRO LICENSED AT V.C. SUMMER

WORK EXPERIENCE:

SUMMARY: 33 months power plant experience
 33 months nuclear plant experience
 (34 months using weighting factors)
 Observed PWR startup-Plant Summer -1984
 Observed BWR startups & shutdowns-Plant Hatch-1982-1983
 3 months hot participation PWR-Plant Summer
 12 months hot participation-BWR

NUCLEAR (GPC)

Position:
 Dates:
 Location:
 Plant Status:
 Job Description:

Shift Technical Advisor ^{April 1985}
 January 1, 1984 to ~~present~~
 Plant Vogtle, Burke Co., GA
 Under construction & startup
 Presently assigned at Summer
 nuclear Station for observation
 training. Observing and participating
 in the performance of surveillance
 test procedures; reactor startup,
 and shutdown, interpretations
 of Tech. Specs and normal control
 room operations.

*Shift Supervisor: April 1985-present
 assigned to V.C. Summer performing
 onshift operating duties.*

Position:
 Dates:
 Location:
 Plant Status:
 Job Description:

Shift Technical Advisor
 January 1, 1983 to Jan 1, 1984
 Edwin I. Hatch Nuclear Plant
 Baxley, Ga.
 Operating
 On temporary assignment from
 Plant Vogtle Nuclear Plant as a
 Shift Technical Advisor
 Responsibilities include:
 Monitor accidents and transients
 to ascertain whether the plant
 is responding as predicted.
 Assist Operations Staff in
 interpreting and applying the
 requirements of Technical Specification
 Engineering Review of Abnormal and
 Emergency Operating Procedures.
 Perform normal duties of the
 Reactor Engineer on shift and
 advise the Shift Supervisor on
 core manipulations.

RESUME

NAME: Robert E. Dorman
DATE OF BIRTH: August 25, 1957
DATE EMPLOYED: June 29, 1957
TITLE: Shift ^{Supv. (SRO)} ~~Technical~~ Advisor
EDUCATION: Bachelor of Science In Mechanical Engineering
University of Florida
LICENSE/CERTIFICATIONS: Certified Technical Advisor at Plant E. I. Hatch
from 1-1-83 to 12-3-83

WORK EXPERIENCE:

SUMMARY:

33 months power plant experience
33 months nuclear plant experience
(34 months using weighting factors)
Observed PWR startup-Plant Summer -1984
Observed BWR startups & shutdowns-Plant Hatch-1982-1983
3 months hot participation PWR-Plant Summer
12 months hot participation-BWR

NUCLEAR (GPC)

Position: Shift Technical Advisor
Dates: January 1, 1984 to present
Location: Plant Vogtle, Burke Co., GA
Plant Status: Under construction & startup
Job Description: Presently assigned at Summer
nuclear Station for observation
training. Observing and participating
in the performance of surveillance
test procedures; reactor startup,
and shutdown, interpretations
of Tech. Specs and normal control
room operations.

Position: Shift Technical Advisor
Dates: January 1, 1983 to Jan 1, 1984
Location: Edwin I. Hatch Nuclear Plant
Baxley, Ga.
Plant Status: Operating
Job Description: On temporary assignment from
Plant Vogtle Nuclear Plant as a
Shift Technical Advisor
Responsibilities include:
Monitor accidents and transients
to ascertain whether the plant
is responding as predicted.
Assist Operations Staff in
interpreting and applying the
requirements of Technical Specification
Engineering Review of Abnormal and
Emergency Operating Procedures.
Perform normal duties of the
Reactor Engineer on shift and
advise the Shift Supervisor on
core manipulations.

Nuclear Notepad Coordinator
Worked on operating experience
assessment report.
Participated in numerous plant
activities including unit shutdowns
and startups

Positon:
Dates:
Location:
Plant Status:
Job Description:

Junior Engineer
June 24, 1981 to January 1, 1983
Plant Vogtle, Burke Co., GA
Under construction
Design reviews and review of
purchase specifications. Review
of various plant publications
including FSAR's. Writing and
review of Plant Flushing Procedures.

NUCLEAR (OTHER)

NONE

NON-NUCLEAR (GPC)

NONE

NON-NUCLEAR (OTHER)

NONE

TRAINING:

NUCLEAR: Course Title:
Dates:
Total Duration:
Vendor:
Description:

STA Training Course (BWR)
August 9, 1982 to October 24, 1982
11 weeks
General Physics
Consisted of 6 weeks of classroom
instruction and 5 weeks of simulator
instruction with detailed study
of HNP systems, BWR operations,
BWR reactor physics, BWR thermohydraulic
HNP Emergency and Operating Procedures
and Technical Specifications.

Course Title:
Dates:
Total Duration:
Vendor:
Description:

STA Training Course
October 5, 1981 to Jan. 22, 1982
16 weeks
General Physics
Included in 16 weeks of classroom
instruction were: detailed study
of VNP systems, PWR operation,
PWR Reactor-Physics, and PWR transient
and Accident Analysis.

Course Title:
Dates:
Total Duration:
Vendor:
Description:

HNP Transient and Accident Analysis
July 18, 1983 to July 22, 1983
40 hours
General Electric
Detailed study of Hatch specific
analysis of transients and accidents.

Course Title:	PWR Course
Dates:	August 31, 1981 to Sept. 4, 1981
Total Duration:	40 hours
Vendor:	General Physics
Description:	Basic Outline of NVP Systems

OTHER

Course Title:	Control Room Management
Dates:	August 22, 1983 to August 24, 1983
Total Duration:	24 hours
Vendor:	General Electric
Description:	Discussion on various methods for decision making in the Control Room environment.

DATE: May 2, 1984

RE: Plant Vogtle - Units 1 & 2
Observation Training - V. C. Summer Nuclear
Plant Training Summary

FROM: R. E. Dorman

TO: J. E. Swartzwelder

From January 4, 1984 to April 23, 1984 I have been assigned to the V. C. Summer Nuclear Plant for observation training. During this time I have observed both normal operations of the unit, and several off-normal occurrences. I have observed (2) reactor start-ups, a reactor trip, a safety injection, a controlled reactor shutdown, (2) 18 month diesel generator tests, synchronization of the main generator to the grid, and the plant response to the loss of various electrical buses. I have observed all modes of operation with the exception of Mode 6. I have observed the performance of many Surveillance Test Procedures. I have read and discussed all of the Emergency Operating Procedures and many other plant procedures. I have asked many questions and had many discussions with operations personnel about plant operations and operational events.

I spent time both in the control room and out in the plant becoming familiar with the responsibilities and daily routines of various operations personnel ranging from the Shift Supervisor to the Auxiliary Operators. I gave my assistance whenever it was needed or desired. Examples of some projects I assisted in are: filling and venting of the Reactor Coolant System, hydro testing of the seal injection piping, leak rate testing, various initial valve lineups. Examples of some "hands on" experience I received under the direct supervision of an operator are: running the recycle evaporator, startup of the Hydrogen Recombiner, perform a minor dilution of the Reactor Coolant System, and rack out several breakers.

The cooperation and assistance given by South Carolina Electric & Gas and especially the Operations Department personnel of V.C. Summer made my training assignment a very valuable and enjoyable experience.

Swartzwelder

1984

0

... have asked the Operations Supervisor to read this training
they and, upon agreeing with it's content to give his signature
designated location.

Bruce C. Williams
Operations Supervisor

15 May 84
Date

RESUME

NAME: Henry H. Butterworth, III
DATE OF BIRTH: September 29, 1958
DATE EMPLOYED: June 22, 1981
TITLE: Shift Supervisor (SRO/Cert)
EDUCATION: BNE, 1981, Georgia Institute of Technology
LICENSE/CERTIFICATIONS: Nuclear Regulatory Commission
Senior Reactor Operator Certification
SRO LICENSED AT FARLEY NUCLEAR PLANT
WORK EXPERIENCE:

SUMMARY

Thirty-four months experience with Georgia Power Company. Thirty-four and one-half months nuclear experience with NTOL Utility Working Group weighting factors. Additional experience is being involved with Unit 1 outage at Farley Nuclear Plant, February, 1984 thru April, 1984.

NUCLEAR (GPC)

Position: Shift Supervisor (SRO/Cert)
Dates: March 9, 1984 - April 22, 1984
Location: Farley Nuclear Plant
Plant Status: Unit 1 & 2 operational with Unit 1 in a refueling outage.
Job Description: I was involved in Hot Participation experience at Farley Nuclear Plant, and was the Plant Coordinator for VEGP at Farley Nuclear Plant.

Present performing operating duties on-shift at Farley Nuclear plant.

Position: Shift Technical Advisor (SRO/Cert)
Dates: October 1, 1983 - March 8, 1984
Location: Farley Nuclear Plant
Plant Status: Unit 1 & Unit 2 operational with periods of Unit 1 or Unit 2 in a refueling outage.
Job Description: I was involved in Hot Participation experience at Farley Nuclear Plant, and was the Plant Coordinator for VEGP at Farley Nuclear Plant. I also reviewed various VEGP Startup procedures and developed an Observation Training Checklist.

Position: Shift Technical Advisor (SRO/Cert)
Dates: Sept. 10, 1983 - Sept. 30, 1983
Location: Vogtle Electric Generating Plant
Plant Status: Units 1 & 2 under construction

NUCLEAR (GPC) CONT'D

Job Description: I coordinated a simulator training program for SRO candidates and administered and developed a final written exam using NRC format.

Position: Simulator Engineer (SRO/Cert)
Dates: Jan. 28, 1983 - Sept. 9, 1983
Location: Vogtle Electric Generating Plant

Plant Status: Units 1 & 2 under construction

Job Description: As a Simulator Engineer (SRO/Cert), I evaluated the Vogtle Simulator computer codes and compared them to actual conditions, assisted in the development of an SRO training program, taught SRO training course simulator and classroom sessions, participated as a third operator in the Control Room Simulator during a NRC-SRO Certification exam, and developed an action plan for the VEGP Training Dept.

Position: Simulator Engineer
Dates: Jan. 22, 1982 - Jan. 27, 1983
Location: Vogtle Electric Generating Plant
Plant Status: Units 1 & 2 under construction
Job Description: As a Simulator Engineer I assisted in acceptance of the Vogtle Control Room Simulator at the factory and on site, I assisted in the development and teaching of the Operations Orientation Course, the E. I. Hatch Emergency Plan Training, and Customer Relations Training at Plant Vogtle, and I was involved in on-the-job instructor training in preparation for an NRC SRO Certification exam.

NUCLEAR (GPC) CONT'D

Position: Junior Engineer
Dates: June 22, 1981 - Jan. 21, 1982
Location: Vogtle Electric Generating Plant
Plant Status: Units 1 & 2 under construction
Job Description: As a Jr. Engineer I performed miscellaneous projects and reviewed plant documents for consistency. I also attended a Shift Technical Advisor course and filled in as a Radwaste Operator at Plant Hatch during an IBEW strike.

TRAINING:

NUCLEAR

Course Title: Hot Participation Experience
Farley Nuclear Plant
Dates: October 1, 1983 - April 22, 1984
Total Course Hrs.: 1100 hrs. (approx.)
Vendor: N/A
Description: On-shift Hot Participation Experience at Farley Nuclear Plant

Course Title: Operations Department
Refresher Training Program
Dates: Jan. 1, 1984 - on going
Total Course Hrs.: 20 hrs/month
Vendor: Georgia Power Company
Description: This course is a monthly topical training program, including references, assignments and a exam. This course is designed to assist in the self study of information needed to pass a SRO Cold License exam.

Course Title: ALARA Awareness Seminar
Date: March 30, 1983
Total Course Hrs.: 8 hrs.
Vendor: Westinghouse Nuclear Technology Division
Description: This course was given to provide engineers with criteria, design features, operational guidelines and operating plant experience relevant to radiation protection and the minimization of occupational dose.

TRAINING:

NUCLEAR (CONT'D)

Course Title: Advanced Simulator
Training NPO-461, Operational
Considerations of Pressurized
Thermal Shock

Dates: Spring, 1983

Total Course Hrs.: 24 hrs.

Course Description: This course reviewed the theory of materials science and pressurized thermal shock, discussed operation during a PTS event, and described PTS events with specific examples. There also was a demonstration of the use of FR-P.1 in the Control Room Simulator during a PTS event.

Course Title: Observation Training/
Farley Nuclear Plant

Dates: October & November, 1982

Total Course Hrs.: 120 hrs.

Vendor: N/A

Course Description: This training was on-shift observation of the Operations Department at Farley Nuclear Plant, to get a big picture perspective of the Control Room environment.

Course Title: Simulator Training

Dates: August 9, 1982 - Sept. 17, 1982

Total Course Hrs.: 240 hrs.

Vendor: General Physics Corporation

Course Description: This course was the simulator portion of the 23 week Operations Technology training course. It covered ANS category's 1, 2, 3 and 4 conditions in the Control Room Simulator, using Unit Operating and Emergency Operating Procedures. There was a final written and oral exam.

Course Title: Hardware & Software Overview
for Vogtle & Hatch Simulators

Dates: Spring, 1982

Total Course Hrs.: 30 hrs.

Vendor: Singer, Link Division

Course Description: This course gave an overview of the hardware and software delivered with the Vogtle and Hatch Simulators.

TRAINING:

NUCLEAR (CONT'D)

Course Title: Shift Technical Advisor
Training
Dates: Sept. 28, 1981 - Jan. 22, 1984
Total Course Hrs: (17 weeks), 680 hrs.
Vendor: General Physics Corporation
Course Description: This course was the classroom
portion of SRO academic training
for entry level engineers.
It covered theory, systems, and
integrated plant operations
with weekly exams and a
final exam.

Course Title: PWR Orientation Course
Dates: Sept. 14, 1981 - Sept. 18, 1981
Total Course Hrs.: 40 hrs.
Vendor: General Physics
Course Description: This class was an overview
of theory, systems and plant
operations; with a worksheet.

TRAINING

OTHER

Course Title: Quest For Excellence
Dates: April 30, 1984 - May 1, 1984
Total Course Hrs.: 16 hrs.
Vendor: Georgia Power Co.
Course Description: This course reviewed the
history of management, discussed
different methods of management,
and presented Georgia Power's
new philosophy on management.

Course Title: Technical Communications
Dates: April 23, 1984 - April 27, 1984
Total Course Hrs.: 40 hrs.
Vendor: Nilsson Professional Consulting, Inc.
Course Description: This course reviewed principles
of writing and speaking in
public. It used numerous
exercises to improve writing
and speaking skills.

Course Title: Project Management C.P.M.
Dates: January 17, 1983 - Jan. 19, 1983
Total Course Hrs.: 20 hrs.
Vendor: Georgia Power Company

TRAINING:

OTHER CONTINUED

Course Description:

This course gave an overview of project management with subjects on Network Analysis, Time/Cost Trade-off, Resource Leveling, PERT, Project Simulation, and Project Control. The course also included a class project and questions for each section.

Course Title:

Customer Service Instructor Training

Dates:

Fall, 1982

Total Course Hrs.:

8 hrs.

Vendor:

Georgia Power Co.

Course Description:

This course gave an overview of the Customer Relations course presenting methods to teach the course, visual aids and general direction of the intent of the course.

Course Title:

Instructor Training Course

Dates:

June 22, 1982 - June 25, 1982

Total Course Hrs.:

28 hrs.

Vendor:

Georgia Power Co.

Course Description:

This course covered methods to present and prepair classroom courses. This course included individual presentations and group presentations with critique and video tape review.

Course Title:

Effective Speaking Course

Dates:

Feb. 8, 1982 - Feb. 10, 1982

Total Course Hrs.:

20 hrs.

Vendor:

Georgia Power Co.

Course Description:

The purpose of this course was to develop the skills to prepare an effective presentation and to give a precise and forcefull delivery. The course included two 5 to 7 minute speeches and a mock city council meeting.

DATE: April 19, 1984

RE: Plant Vogtle - Units 1 and 2
Observation Training - Farley Nuclear Plant
Training Summary

FROM: H.H. Butterworth

TO: J.E. Swartzwelder

From October 3, 1984, to April 19, 1984, I have been assigned to the Farley Nuclear Plant for observation of the Operations Department. During my seven months at Farley, I have observed many normal and off-normal conditions. I have observed three (3) reactor start-ups, three (3) reactor trips, eight (8) power changes $>\pm 10\%$, fuel unloaded from the core, fuel loaded into the core, auxiliary feedwater auto starts, diesel generator auto starts, and synchronization of the main generator to the grid. I have observed all mode changes, mode 1 to mode 6, defueled and mode 6 to mode 1. I also have followed system operators through the plant on their rounds or when they were troubleshooting problems. I have asked many questions and had many discussions with operations personnel about plant operations and operational events. I also have worked with the technical staff during low power physics testing.

I have satisfactorily completed an observation training on-shift checklist and maintained detailed documentation of daily activities through daily logs, biweekly reports, and off-site experience reports. Although I have not been involved in the direct manipulation of controls, I have assisted the operators by taking control room logs and performing various surveillance test procedures. While in the control room, I strove to understand the basis behind decisions that have been made and to ask questions and offer suggestions to the discussions held.

The tremendous amount of cooperation from Alabama Power Company and the Operations Department has created an atmosphere of rapid learning yielding a very valuable training experience.

I have asked the Operations Superintendent to read this training summary and, upon agreeing with its content, to give his signature in the designated location.

H. H. Butterworth

ON Mowry
Operations Superintendent

4/20/84
Date

HHB:mjk

cc: W.F. Kitchens
K.R. Holmes
L.S. Williams (Alabama Power Company)

DATE: April 19, 1984

RE: Plant Vogtle - Units 1 and 2
Observation Training - Farley Nuclear Plant
Training Summary

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I have satisfactorily completed an observation training on-shift checklist and maintained detailed documentation of daily activities through daily logs, biweekly reports, and off-site experience reports. Although I have not been involved in the direct manipulation of controls, I have assisted the operators by taking control room logs and performing various surveillance test procedures. While in the control room, I strove to understand the basis behind decisions that have been made and to ask questions and offer suggestions to the discussions held.

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EN Maren
Operations Superintendent

4/20/84
Date

HBB:mjk

cc: W.F. Kitchens
K.R. Holmes
L.S. Williams (Alabama Power Company)

RESUME

NAME: Clayton L. Christiansen
DATE OF BIRTH: January 30, 1959
DATE EMPLOYED: June 29, 1981
TITLE: Shift ^{Supv. (SR)} ~~Technical~~ Advisor
EDUCATION: Bachelor of Science in Mechanical Engineering from the University of Virginia

LICENSE/CERTIFICATIONS: *None all attached*
WORK EXPERIENCE: *SRO LICENSED AT FARLEY NUCLEAR PLANT*

SUMMARY

2 1/2 years power plant experience
2 1/2 years nuclear power plant experience (2 1/2 years using weighting factors)

NUCLEAR (GPC)

Position: Shift Technical Advisor *Feb. 1985*
Dates: February 5, 1983 to ~~Present~~
Location: Vogtle Electric Generating Plant
(January 4, 1984 to Present)
E. I. Hatch Nuclear Plant
(February 5, 1983 to January 3, 1984)
Plant Status: VEGP 1 and 2 under construction
HNP 1 and 2 Operational
Job Description: Plant Vogtle: Write and review Annunicator Response Procedures.
Plant Hatch: On temporary assignment from Alvin W. Vogtle Electric Generating Plant as a Shift Technical Advisor (STA). Responsibilities include: Monitor accidents and transients to ascertain whether the plant is responding as predicted, perform an early review of planned activities for the upcoming shift to ascertain whether special considerations or precautions are warranted and make appropriate recommendations to Operations Supervisor, assist operations staff in interpreting and applying the requirements of Technical Specifications, engineering review of abnormal and emergency operating procedures, perform normal duties of the Reactor Engineer on shift and advise the Shift Supervisor on core manipulations, work on assigned accountabilities (jet pump performance, HNP Operating Experience Assessment Report, review of Annunicator Response procedures).

*SHIFT SUPERVISOR
Feb. 1985 - Present
Assigned to FARLEY Nuclear
Plant performing onshift
operating duties.*

WORK EXPERIENCE:

NUCLEAR (GPC)
CONT'D

Position: Associate Engineer
Dates: December 25, 1982 to February 4, 1983
Location: E. I. Hatch Nuclear Plant
Plant Status: HNP 1 and 2 operational
Job Description: Perform the duties of a Shift
Technical Advisor

Position: Junior Engineer
Dates: June 29, 1981 to December 29, 1982
Location: E. I. Hatch Nuclear Plant (August 9,
1982 to December 24, 1982)
Vogtle Electric Generating Plant
(June 29, 1981 to August 8, 1982)
Plant Status: HNP-1 and 2 operational
VEGP 1 and under construction
Description: STA training and assume duties as STA
while on temporary assignment (HNP);
FSAR reviews, action items, spare
parts program, STA training (VEGP).

NUCLEAR (OTHER)

None

TRAINING:

NUCLEAR

Course Title: Control Room Management
Dates: August 25, 1983 to August 27, 1983
Total Duration: 3 days
Vendor: General Electric
Description: Study of problem solving and decision
making techniques that apply to a
control room atmosphere.

Course Title: Abnormal Events Analysis (BWR)
Dates: July 18, 1983 to July 22, 1983
Vendor: General Electric
Description: Detailed study of HNP analyzed
accidents and transients. A
comprehensive written examination was
included on the final day, which was
required to pass the course.

TRAINING

NUCLEAR (CONT'D)

Course Title: STA Training Course (BWR)
Dates: August 9, 1982 to October 24, 1982
Total Duration: 11 weeks
Vendor: General Physics
Description: Detailed study of HNP-2 systems, BWR operation, BWR reactor physics, BWR thermohydraulics, HNP-2 emergency procedures, and HNP-2 Technical Specifications included in 6 weeks of classroom instruction and 5 weeks of HNP simulator instruction, with weekly tests and a final written and oral examination.

Course Title: STA Training Course (PWR)
Dates: March 1, 1982 to July 30, 1982
Total Duration: 22 weeks
Vendor: General Physics
Description: Detailed study of VEGP systems, PWR operation, PWR reactor-physics, and PWR transient and accident analysis included in 16 weeks of classroom instruction and 6 weeks of VEGP simulator instruction, with weekly tests and a final written and oral examination.

Course Title: PWR Course
Dates: August 17, 1981 to August 21, 1981
Total Duration: 40 Hours
Vendor: General Physics
Description: Basic outline of VEGP systems.

NON-NUCLEAR

Course Title: Technical Communications
Dates: February 9, 1982 to February 12, 1982
Total Duration: 28 Hours
Vendor: Nilsson Professional Consulting, Inc.
Description: Instruction on improving technical communication (business letters, procedures, speeches, etc.)



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

FEB 26 1985

LICENSE

Docket No. 55-20552

Mr. Clayton L. Christiansen
202 Fieldcrest Apts.
Dothan, AL 36301

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and subject to the conditions and limitations incorporated herein, the Nuclear Regulatory Commission hereby licenses you to direct the licensed activities of licensed operators at, and to manipulate all controls of the Alabama Power Company, Farley Nuclear Plant, Unit Nos. 1 and 2, Facility License Nos. NPF-2 and NPF-8.

Your License No. is SOP-20283 and your Docket No. is 55-20552. Your license is effective on the date of this letter, and unless sooner terminated or renewed, it shall expire two years from that date.

Your license is subject to the provision of Title 10 of the Code of Federal Regulations, Chapter 1, Part 55, Section 55.31, with the same force and effect as if fully set forth herein.

While performing licensed duties, you shall observe the operating procedures and other conditions specified in the facility license and shall comply with the following condition:

You shall wear corrective lenses while performing the activities for which you are licensed.

The issuance of this license is based upon examination of your qualifications, including the representations and information contained in your application for license.

A copy of your license has been made available to your management.

For the Nuclear Regulatory Commission

Albert F. Gibson, Chief
Operations Branch
Division of Reactor Safety

cc: Alabama Power Company
ATTN: Plant Manager-Nuclear
Farley Nuclear Plant
P. O. Drawer 470
Ashford, AL 36312

RESUME

NAME: Jimmy P. Cash

DATE OF BIRTH: February 12, 1957

DATE EMPLOYED: April 6, 1981

TITLE: ~~Shift Technical Advisor~~ *Shift Supr. (SRO)*

EDUCATION: Bachelor of Mechanical Engineering, Georgia Tech., 1981

LICENSE/CERTIFICATIONS: Engineer-In-Training (GA), 1981

WORK EXPERIENCE: *SRO LICENSED AT FARLEY NUCLEAR PLANT*

SUMMARY

Three years power plant experience
Three years nuclear power plant experience
(2½ yrs. using weighting factors)
Participated in PWR startup, shutdown and
refueling-Sequoyah, 1983-1984
Participated in Initial Test Program-
McGuire, 1982

NUCLEAR (GPC)

*Shift Supervisor -
Feb 1985 - present
Assigned to FARLEY Nuclear
Plant performing on shift
operating duties.*

Position: Shift Technical Advisor
Dates: 5-21-84 - ~~Present~~ *Feb. 1985*
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under construction & startup
Job Description: Responsible for writing and
reviewing Emergency Operating
Procedures for Plant Vogtle

Position: Shift Technical Advisor
Dates: 10-17-83- 5-19-84
Location: Sequoyah Nuclear Plant (TVA),
Chattanooga, TN
Plant Status: Operating Nuclear Plant
Job Description: Responsible for learning
everything I can about how
TVA runs Sequoyah Nuclear
Plant.

Position: Associate Engineer
Dates: 10-5-82 to 10-16-83
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under construction & startup
Job Description: Responsible for the writing
and reviewing of system flush
procedures for Plant Vogtle
systems.

NUCLEAR (GPC) CONTINUED

Position: Junior Engineer
Dates: 3-15-82 to 10-3-82
Location: Plant McGuire (Duke),
Cornelius, N.C.
Plant Status: Unit I - Operational
Unit II - Startup
Job Description: I was a Test Supervisor
from shortly before the
RCS cold Hydro until
after the Hot Functional
Tests were completed.

Position: Junior Engineer
Dates: 4-6-81 to 3-10-82
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under construction & startup
Job Description: Responsible for the review
of the Main Control Board
Human Factor Report and
the Plant Availability Report.
Assisted in the development
of the Records Management
System and the Plant Procedures
Index and Schedule.

Position: Plant Equipment Operator
Dates: 7-8-81 to 7-26-81
Location: Plant Hatch, Baxley, Ga.
Plant Status: Commercial operation
Job Description: Responsible for daily rounds
and maintenance during the
IBEW strike.

TRAINING:

NUCLEAR

Course Title: Sequoyah Nuclear Plant
Licensed Operator Requalification
Week II, 1984
Dates: 3-26-84 to 3-30-84
Total Course Hrs.: 40
Vendor: TVA
Description: Operator requalification class.
The major topic covered was
emergency procedures. One
half of the course was
lecture/discussion. The other
half was in the Sequoyah
simulator.

TRAINING:

NUCLEAR (CONT'D)

Course Title: Sequoyah Nuclear Plant Licensed
Operator Requalification
Weeks III & IV, 1983
Dates: 12-12-83 to 12-23-83
Total Course Hrs.: 88
Vendor: TVA
Description: Operator requalification class:
This class covered a variety
of topics ranging from Reactor
Physics to Radiological
Emergency Plan. Half the class
was lecture/discussion. The
other half was in the Sequoyah
Simulator.

Course Title: Simulator Class
Dates: 2-21-83 to 3-29-83
Total Course Hrs.: 160
Vendor: General Physics
Description: A course in Reactor Operations.
One half the course was
lecture/discussion. The other
half was in the Vogtle
simulator.

Course Title: Shift Technical Advisor Training
Dates: 10-15-81 to 1-22-82
Total Course Hrs.: 640
Vendor: General Physics
Description: Training in General Nuclear
Technology and Specific
Plant Vogtle Systems, Equipment
and procedures.

Course Title: PWR Course
Dates: 8-31-81 to 9-4-81
Total Course Hrs.: 40
Vendor: General Physics
Description: Introduction to PWR Technology

TRAINING

NON-NUCLEAR

Course Title: Critical Path Method
Dates: 5-9-83 to 5-11-83, 7-25-83
Total Courses Hrs.: 32
Vendor: Georgia Power Co.
Description: Introduction to the Critical
Path Method of Scheduling.

TRAINING

NON-NUCLEAR (CONT'd)

Course Title:	Technical Communications
Dates:	2-9-82 to 2-12-82
Total Course Hrs.:	32
Vendor:	Nilsson Professional Consulting
Description:	Instruction in written and oral communication techniques.



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

FEB 26 1985

LIC/NSE

Docket No. 55-20551

Mr. Jimmy P. Cash
302 Fieldcrest Apts.
Dothan, AL 36301

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and subject to the conditions and limitations incorporated herein, the Nuclear Regulatory Commission hereby licenses you to direct the licensed activities of licensed operators at, and to manipulate all controls of the Alabama Power Company, Farley Nuclear Plant, Unit Nos. 1 and 2, Facility License Nos. NPF-2 and NPF-8.

Your License No. is SOP-20282 and your Docket No. is 55-20551. Your license is effective on the date of this letter, and unless sooner terminated or renewed, it shall expire two years from that date.

Your license is subject to the provisions of Title 10 of the Code of Federal Regulations, Chapter 1, Part 55, Section 55.31, with the same force and effect as if fully set forth herein.

While performing licensed duties, you shall observe the operating procedures and other conditions specified in the facility license.

The issuance of this license is based upon examination of your qualifications, including the representations and information contained in your application for this license.

A copy of your license has been made available to your management.

For the Nuclear Regulatory Commission

A handwritten signature in dark ink, appearing to read "Albert F. Gibson".

Albert F. Gibson, Chief
Operations Branch
Division of Reactor Safety

cc: Alabama Power Company
ATTN: Plant Manager-Nuclear
Farley Nuclear Plant
P. O. Drawer 470
Ashford, AL 36312

RESUME

NAME: James Dale Williams
DATE OF BIRTH: October 24, 1959
DATE EMPLOYED: February 9, 1982
TITLE: Shift Supervisor
Education: Bachelor of Science (Nuclear), University of Tennessee
Knoxville, 1981
LICENSE/CERTIFICATION: SRO/STA (Hatch) Certified by General Physics,
October, 1982

WORK EXPERIENCE:

SUMMARY

- 2 years experience at an operating nuclear power plant (E.I.Hatch-BWR)
- Participated in core discharge and reload of both Hatch Units-U1: Spring & Fall of 1983
U2: Spring 1983 and Winter 1984
- Participated in Unit Startup from refueling to rated power of both Hatch Units.
Unit 1: Spring & Fall of 1983
Unit 2: Spring 1983

NUCLEAR(GPC)

Position: Shift Technical Advisor
Dates: February 15, 1983- Present
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under Construction & Startup
Description: Assigned to Plant Hatch to maintain an STA/SRO Certification and to perform the duties of the STA and Reactor Engineer on shift.

The STA performs detailed analysis of Unit transients and accidents. Also, the STA must investigate the cause(s) of unusual or abnormal operating events. The STA must be on site and available to the Control Room when either Unit is in operational conditions 1,2, or 3.

During all planned evolutions on either unit (eg. Turbine Testing, MSIV Surveillance, Rod Pattern Adjustments, Unit Startup or Shutdown, Load Changes, etc.) the STA is required to be present in the Control Room and to act in an advisory capacity to the Shift Supervisor.

NUCLEAR (GPC) CONTINUED

As a Reactor Engineer, responsibilities include review and revision of operating and emergency procedures. Also, management of both unit's incore neutron monitoring detectors and their procurement are a significant task. The Reactor Engineer is responsible for maintaining fuel performance as dictated by General Electric's Pre-conditioning Interim Operating Management Recommendations (PCIOMR).

Position:	Junior Plant Engineer
Dates:	February 9, 1982- February 15, 1983
Location:	Plant Vogtle, Burke Co., Ga.
Plant Status:	Under Construction & Startup
Description:	Attend Vogtle STA course from Feb. to July 1982. Attend Hatch STA/SRO Certification training from August to October, 1982. From October 1982 to February 1983, perform Reactor Engineering tasks on shift.

NUCLEAR (OTHER)
(Analysis and
Measurement
Services)

Position:	Computer Analyst/Engineer
Dates:	June 1981 to January 1982
Plant Status:	NA
Job Description:	Perform Response Time Analysis on RTD's installed at an operating Nuclear Facility (Arkansas Nuclear One). Create software for processing and collecting the RTD data.

NON-NUCLEAR (GPC)

NONE

NON-NUCLEAR (OTHER)

Position:	Research Assistant to N.E.Dept. Professor (DR. T.W. Kerlin, Ph.D)
Dates:	December 1980 to March 1981
Location:	University of Tennessee
Plant Status:	NA
Job Description:	Investigate the effects on thermocouple and RTD response times as the instrument's geometry and the flow rate of the measured fluid are varied.

TRAINING:

NUCLEAR

Course Title: Plant Hatch STA Certification
Dates: August 9, 1982 - Oct. 24, 1982
Total Course Hrs.: 11 weeks
Vendor: General Physics
Description: A detailed study of Plant Hatch Systems and Operation, BWR Reactor Physics, BWR Thermal Hydraulics, normal and abnormal operating procedures including Plant Technical Specifications. The course included 6 weeks of classroom instruction and 5 weeks of Plant Hatch Simulator instruction. Testing consisted of weekly tests, an SRO Certification written examination, and a Simulator oral examination.

Course Title: On-the-Job Reactor Engineering Training
Dates: Oct. 1982 - Feb. 1983
Total Course Hrs.: 13½ weeks
Vendor: NA
Description: Work with and observe and Existing Plant Hatch STA working regular shift hours. Detailed study in areas of Reactor Physics, Nuclear Instrumentation, Power Distribution Calculations, Core Flow Determinations, Technical Specifications, Process Computer, Preconditioning Interim Operating Management Recommendations (PCIOMR), Control Rod Pattern Sequence Development, and Plant Operating Strategies.

Course Title: Plant Vogtle STA Training
Dates: March 1, 1982 to July 26, 1982
Total Course Hrs.: 22 weeks
Vendor: General Physics
Description: A detailed study of Plant Vogtle systems and operations, PWR Reactor Physics, normal and abnormal operating procedures. Course included 15 weeks of classroom instruction and 7 weeks of Plant Vogtle Simulator instruction.

DATE: August 29, 1984

RE: Plant Vogtle - Units 1 & 2
Observation Training - Sequoyah Nuclear Plant
Training Summary

FROM: J. D. Williams

TO: J. E. Swartzwelder

From May 14, 1984, to August 17, 1984, I have been assigned to the Sequoyah Nuclear Plant. My assignment for the three month period was to observe the Operations Department. During my stay, I observed many normal and abnormal occurrences. Included in my experiences are two (2) criticalities, one (1) shutdown from Mode 1 to Mode 2, three (3) power increases from Mode 2 to Mode 1, two (2) induced Xenon oscillations, two (2) generator synchronizations, several diesel generator auto starts (simulated signals), and a Radiological Emergency Preparedness Drill.

To more fully comprehend the aspects of operating a nuclear power plant on a day to day basis, I spent the majority of my time following the various shift personnel on their rounds. On occasion, special problems occurred and I accompanied the responsible individuals to observe the problem resolution. During these events, I asked many questions and entered into comprehensive discussions with the staff on operational philosophy and the reasons for particular actions.

I also spent many hours with the Reactor Engineering group doing calorimetrics and flux mappings. The Reactor Engineering personnel comprise the nucleus of the STA staff. Working with these people gave me an opportunity to compare the activities of an STA at a PWR against those activities I performed at Hatch (BWR).

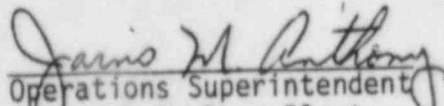
In keeping with the documentation requirements set forth by Vogtle management, I have satisfactorily completed the on-shift check list. Also, I have maintained a detailed log book, written biweekly reports, and submitted off-site experience reports. One other piece of documentation that I maintained was a personal daily summary which detailed the events I observed and also it allowed me to record my personal reflections on various items.

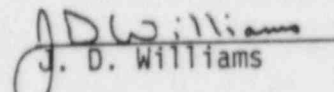
Even though I was not permitted to manipulate plant controls, I intently watched the actions of the shift staff and discussed the reasons for particular requirements. While with the control room personnel, I would inquire about the bases of certain decisions and offer suggestions for problem resolution.

J. E. Swartwelder
Observation Training - Sequoyah Nuclear Plant
Training Summary
August 29, 1984
Page 2

I wish to gratefully acknowledge the helpfulness and extreme cooperation of the Sequoyah Operations Department. The hospitality and patience shown by the operations personnel created an atmosphere of rapid learning. My time at Sequoyah Nuclear Plant was a most valuable training experience.

I have asked the Operations Superintendent to read this experience summary and, agreeing to its contents, to give his signature below.


Operations Superintendent
Sequoyah Nuclear Plant


J. D. Williams

JDW/1tm

RESUME

NAME: Stephen P. Johnson
DATE OF BIRTH: December 30, 1954
DATE EMPLOYED: May 26, 1981
TITLE: Shift Supervisor (SRO/CERT)
EDUCATION: B.S. Nuclear Engineering, North Carolina State University
LICENSES/CERTIFICATIONS: SRO Instructor Certified (Vogtle) by NRC,
March 5, 1984

WORK EXPERIENCE:

SUMMARY

3 3/4 years power plant experience
3 3/4 years nuclear power plant experience
(2 3/4 years using weighting factors)

NUCLEAR (GPC)

Position: Shift Supervisor
Dates: March 23, 1984 to present
Location: Vogtle Electric Generating Plant
Waynesboro, Ga.
Plant Status: Under construction and ITP
Job Description: Responsible for the safe and efficient operation of assigned unit. Authorize maintenance and testing activities, issue equipment clearances and directs operational activities of assigned personnel.

Position: Associate Engineer
Dates: November 27, 1982 to March 23, 1984
Location: Vogtle Electric Generating Plant
Waynesboro, Ga.
Plant Status: Under construction and startup
Job Description: Co-ordinate Operations Department support to Start-Up program.
Co-ordinate Operations Surveillance Procedure Program. Review procedures for Operations Department input.
Writing of System Operating Procedures.
(May 1982 to April 1983)
Reviewing Flushing Procedures
(July 1982 to April 1983)
Implementing Operations Assessment Program
(October 1982 to February 1983)

NUCLEAR
(Cont'd)

Position: Plant Equipment Operator
(Union Strike)
Dates: July 8, 1981 to July 22, 1981
Location: Hatch Nuclear Plant
Baxley, Georgia
Plant Status: Operating
Job Description: Unit I Maintenance Plant Equipment
Operator

NUCLEAR (OTHER)

Position: Assistant Project Schedule
Shift Co-ordinator
Union Electric Co.
Dates: May 11, 1984 to October 10, 1984
Location: Callaway Nuclear Plant
Fulton, MO
Plant Status: Start-up Testing
Job Description: Hot participation in plant operations
including fuel load, initial heatup
and criticality. Acted as
ombudsman for work activities
planned for each day. Participated
in low-power physics testing.

Position: Start-up Engineer (on loan from GPC)
Southern California Edison
Dates: Sept. 21, 1981 to May 28, 1982
Location: SONGS 2 & 3; San Clemente, CA
Plant Status: Pre-op and Start-up testing
Job Description: Cog. (lead) engineer for Ex-Core
Nuclear Instrumentation for Unit II.
Count-rate monitor and reactor
flange observer during initial
fuel load for Unit 2. Support of
RCS primary hydro test for Unit 3.
Test summary organizing for HPCI
and LPSI pre-op test results
for Unit 2.

NON-NUCLEAR

Position: After Hours Guard (North Carolina
Museum of Art)
Dates: Sept. 7, 1976 to April 30, 1981
Location: NCMA, Raleigh, N.C.
Job Description: After hours security officer at
building housing the State art
collection.

TRAINING:

NUCLEAR

Course Title: Respiration-Protection Training
Dates: June 14, 1984
Total Course Hrs: Five hours
Vendor: Callaway training staff
Description: Training in types use and care of respirators; Fitting and testing of a respirator.

Course Title: General Employee Training
Dates: March 20 thru March 22, 1984
Total Course Hrs: Twenty hours
Vendor: Callaway training staff
Description: Introduction to Security and Radiation Protection Procedures at Callaway Nuclear Plant. Tour of plant facilities.

Course Title: SRO Certification Training
Dates: Nov. 14, 1983 to Jan. 27, 1984
Total Course Hrs: 292 classroom/108 simulator
Vendor: General Physics Corp./GPC
Description: Accelerated course on integrated system operations including malfunction and accident analysis.

Course Title: Simulator Training
Dates: August 15, 1983 to Sept. 23, 1983
Total Course Hrs: 120 classroom/120 simulator
Vendor: General Physics Corp./GPC
Description: Six weeks of plant operations on the VEGP simulator including normal operations, start-up and emergency operations.

Course Title: Operations Technology Training
Dates: April 18, 1983 to August 12, 1983
Total Course Hrs: 664 hrs.
Vendor: General Physics Corp./GPC
Description: Seven weeks of basics including nuclear theory, chemistry, heat transfer and fluid flow, and health physics. Ten weeks of systems instructions covering all major plant systems.

TRAINING

NUCLEAR
(Cont'd)

Course Title: SONGS Employee Red and Blue
Badge Training
Dates: October 6, 1981 and Oct. 13-14, 1981
Total Course Hrs: Eighteen
Vendor: SONGS Training Staff
Description: Introduction to Security and Radiation
Protection Procedures at SONGS

Course Title: PWR Orientation
Dates: August 31, 1981 to Sept. 4, 1981
Total Course Hrs: 40
Vendor: General Physics Corporation
Description: Familiarization with PWR plant systems
Course Title: Plant Hatch Familiarization (Pre-
Strike Training)
Dates: June 1-5, 1981 & June 15-19, 1981
Total Course Hrs: 80
Vendor: Plant Hatch Training Staff
Description: Hatch Security & Radiation
Protection Training; Emergency
Procedures; Administrative Procedures
and Control; Firefighting and
Respirator Training; and Plant
Systems Operation and Location.

Course Title: Industrial Radiation Safety
Dates: March 15-18, 1980
Total Course Hrs: 24
Vendor: N. C. State University Continuing
Education & The Department of
Nuclear Engineering.
Description: Colloquim on current Industrial
radiation safety and radiation
protection methods.

NON-NUCLEAR

Course Title: New Supervisors Training
Dates: November 26-30, 1984
Total Course Hrs: 40
Vendor: GPC (corporate)
Description: Introduction to supervision and
supervisory techniques; Introduction
to employee resources available
from GPC.

TRAINING

NON-NUCLEAR
(Cont'd)

Course Title: Control Room Management
Dates: November 19-21, 1984
Total Course Hrs: 24
Vendor: GE
Description: Provide control room management personnel with a foundation upon which to build skills in the areas of observation, diagnosis, decision making and planning. Utilize several analysis techniques.

Course Title: Labor Relations Training
Dates: October 16-18, 1984
Total Course Hrs: 16
Vendor: GPC
Description: Familiarize the supervisor with the Labor Relations Department and its functions in order to help management improve labor/management relations and reduce grievances.

Course Title: SONGS Jobsite Safety Program
Dates: September 23, 1983
Total Course Hrs: Three
Vendor: Bechtel Power Corporation
Description: Industrial safety and accident prevention.

Course Title: Confined Spaces Monitoring Training
Dates: November 11, 1982
Total Course Hrs: Three
Vendor: Bechtel Power Corporation
Description: Confined space and closed vessel safety. Explanation of toxic gases and meters used to measure oxygen content.

DATE: April 10, 1985

RE: Plant Vogtle - Units 1 & 2
Offsite Experience Summary
Union Electric's Callaway Plant, 5-11-84 to 10-10-84

FROM: S. P. Johnson

TO: J. E. Swartzwelder

The activities I participated in or observed at Plant Callaway involve preparation for fuel load, initial fuel load, recovery from fuel load and heatup to operating conditions. Other activities include pre-criticality testing, initial criticality and low power physics testing. On August 3, 1984, I was assigned the duties of Assistant Project Schedule Shift Coordinator within the UENO (Union Electric Nuclear Operations) organization. In this capacity, I was responsible for assisting Operations management with developing a daily test schedule, expediting testing problems as they arose and tracking operations mode change requirements.

I observed the loading of approximately 60 fuel assemblies, some of which I observed from the refueling machine. I assisted the supervision of the tensioning of the reactor vessel head.

I participated in the filling and venting of the RCS, including both venting and RCP operation in the Containment Building and RCS pressurization and RCP operation from the Control Room.

I participated in many surveillance tests including Main Feedwater Valve Operability, AFW Pump (both motor-driven and turbine-driven) Operability, Boron Injection Flow Paths Operability, ESW Valve Lineup Verification, Diesel Generator Operability Test, Remote Shutdown Panel Operability, Reactor Trip Breaker P-4 Verification and RCS Inventory Balance, among others.

I participated in many of the test activities including LOSP (ESFAS) Test, CVIS (Cont. Isolation) and CRVIS (Control Room Isolation) testing, MSIV and MFIV testing, ECCS venting, SG level control (Auto) testing, PZR Heater and Sprays Capability test, Rod Drop Timing tests (full flow), Dilution to Criticality, Boron End Point Measurements, Rod Worth tests and PORV Capability test, among others.

RESUME

NAME: Thomas S. Hargis
DATE OF BIRTH: September 14, 1950
DATE EMPLOYED: January 5, 1981
TITLE: Shift Supervisor (SRO/CERT)
EDUCATION: Bachelor of Science, Electrical Engineering, Virginia Military Institute, 1974
LICENSE/CERTIFICATIONS: SRO Instructor certified (Vogtle) by NRC, January 1984

WORK EXPERIENCE:

SUMMARY: 4 years power plant experience
4 years nuclear power plant experience
(39.5 months using weighting factors)

NUCLEAR (GPC)

Position: Startup Test Supervisor (SRO CERT)
Dates: January 2, 1985 to Present
Location: Plant Vogtle, Waynesboro, GA
Plant Status: Construction, Unit 1 75% Complete

Job Description: To supervise the preparation, review, approval and implementation of the procedures for the startup testing of Plant Vogtle. Also, to develop the schedule for the startup test phase of the Initial Test Program.

Position: Shift Technical Advisor (SRO CERT)
Dates: July 1984 to December 1984
Location: Plant V. C. Summer, Columbia, SC
Plant Status: Commercial Operation
Job Description: Assigned to Plant Summer for six months for Hot Participation Training. This included a two month refueling outage, a normal reactor startup/shutdown and a reactor trip.

Position: Shift Technical Advisor (SRO CERT)
Dates: January 28, 1984 to July 1984
Location: Plant Vogtle, Waynesboro, GA
Plant Status: Construction, Unit 1 60% complete
Job Description: Developed an Operations Dept. Training Program for Senior Reactor Operator candidates. This program was designed to keep SRO candidates informed of new information and to review previously presented training.

Position: Startup Test Procedure Coordinator
Dates: October 25, 1982 to November 14, 1983
Location: Plant Vogtle, Waynesboro, GA
Plant Status: Construction, Unit 1 40% Complete
Job Description: To coordinate the preparation and approval of the procedures for the Startup Test phase of Plant Vogtle's Initial Test Program.

Position: Spare Parts Program Coordinator
Dates: January 22, 1982 to October 25, 1982
Location: Plant Vogtle, Waynesboro, GA
Plant Status: Construction, Unit 1 35% Complete
Job Description: To coordinate the efforts of the Architect/Engineer, GPC Nuclear Procurement Standards Group and GPC Power Generation personnel to produce a parts breakdown of all equipment in the plant. Also, to produce a listing of required spare parts to support Unit 1 startup and the first 5 years of commercial operation.

Position: Plant Hatch Unit 1 - Radwaste Operator
Dates: July 1981 (Seventeen Days)
Location: Plant Hatch, Baxley, GA
Plant Status: Commercial Operation
Job Description: Acted as operator for Plant Hatch's Unit 1 radwaste processing unit. Processed both liquid and solid radwaste from receipt to release/shipment from the plant.

Position: Nuclear Procurement Standards Writer
Dates: January 5, 1981 thru October 1, 1981
Location: GPC Headquarters Bldg., Atlanta, GA
Plant Status: Construction, Unit 1: 30% Complete
Job Description: To write and review procurement documents to purchase spare parts for Plant Vogtle. To develop an automated system for producing required procurement documents.

NON-NUCLEAR (OTHER)

Position: Technician
Dates: May 5, 1974 to July 15, 1974
Location: Portsmouth, VA; VEPCO District Office
Plant Status:
Job Description: To locate underground power lines, calculate required capacitance additions to bring power factors back in line. Worked with other utilities to layout or locate underground service for new installations. Inspected distribution lines for needed repairs.

TRAINING:

NUCLEAR

Course Title: SRO Certification Course
Dates: November 14, 1983 to January 27, 1984
Total Course Hrs.: 360 Hours
Vendor: Georgia Power Company
Description: To provide academic and simulator training to test for an NRC SRO Instructor Certification.

Course Title: STA - Simulator
Dates: September 13, 1982 to October 22, 1982
Total Course Hrs.: 240 Hours
Vendor: General Physics Corp.
Description: To provide simulation time at the controls of Plant Vogtle control board. To learn normal and transient parameters, and gain operation knowledge of Plant Vogtle's Reactor.

Course Title: STA - Academics
Dates: October 1, 1981 to January 22, 1982
Total Course Hrs.: 680 Hours
Vendor: General Physics Corp.
Description: The course of instruction covered Reactor theory, Plant Vogtle system design and control, integrated plant control and casualties.

Course Title: PWR Introductory Course
Dates: Spring 1981
Total Course Hrs.: 40 Hours
Vendor: General Physics Corp.
Description: Provide basic information about the systems and operation of PWR power plants.

NON-NUCLEAR (GPC)

Course Title: Leadership Training Course
Dates: March 15-19, 1982
Total Course Hrs.: 40 Hours
Vendor: GPC Training - Atlanta
Description: To provide training in Leadership and Problem solving.

Course Title: Project Management, Critical Path Method
Dates: February 28 thru March 3, 1983
Total Course Hrs.: 32 Hours
Vendor: GPC Training - Atlanta
Description: To provide training in Project Control through use of the Critical Path Method

DATE: January 18, 1985
RE: Plant Vogtle - Units 1 & 2
Hot Participation Training
V. C. Summer Station Training Summary
FROM: T. S. Hargis
TO: J. E. Swartzwelder

I was assigned to V. C. Summer Station for the six month period of July through December 1984. My assignment was, to observe the Operations Dept. in their day-to-day activities, to gain experience in the operation of a nuclear power plant.

I observed or participated in a large number of plant evolutions during this period. Some of these were; a reactor trip and quick restart, normal startup/shutdown, observation of the recovery from a failed open pressurizer spray valve while in mode 3, and a two month refueling outage.

To understand all aspects of the operation of a nuclear plant, I spent many hours observing the operators, both in the plant and in the control room, while they performed their duties. This allowed me to discuss at length the reasons behind decisions that were made, or actions taken in response to plant transients.

As part of the documentation of this training, I kept a daily log book of my activities and completed the Observation Training Checklist for V. C. Summer Station. These records have been forwarded to the Training Dept. for inclusion in my records.

B. Williams
OPERATIONS SUPERINTENDENT
V. C. SUMMER STATION

Thomas S. Hargis
T. S. HARGIS

TSH/vsj

RESUME

NAME: Michael B. Lackey
DATE OF BIRTH: September 27, 1958
DATE EMPLOYED: June 1, 1981
TITLE: Shift Supervisor (SRO/CERT)
EDUCATION: Bachelor of Science - Mechanical Engineering,
Clemson University, 1981
LICENSE/CERTIFICATIONS: SRO Instructor Certified (Vogtle) by NRC, March, 1984
Passed Engineer-In-Training (EIT) examination

WORK EXPERIENCE:

SUMMARY

3 3/4 years power plant experience
2 3/4 years nuclear power plant experience
(2 1/2 years using weighting factors)

NUCLEAR (GPC)

Position:	Shift Technical Advisor
Dates:	July 9, 1984 to Present
Location:	Plant Vogtle
Plant Status:	Under construction
Job Description:	Procedure Coordinator for Unit Operating Procedures, Operations Surveillance Procedures and Annunciator Response Procedures. Counselling Coordinator for licensed and non-licensed covered employees.
Dates:	January 28, 1984 to July 8, 1984
Job Description:	Developing Operations Surveillance Procedure program, writing and reviewing a variety of operations procedures.
Position:	Associate Engineer
Dates:	September 23, 1983 to November 13, 1983
Plant Status:	Under construction
Job Description:	Coordinating security plan and special projects, writing and reviewing operations procedures.
Dates:	May 17, 1982 to April 17, 1983
Job Description:	Establishing operational phase equipment qualification program, performance engineering, mechanical action items.

NUCLEAR (GPC)
(Cont'd)

Position: Junior Engineer
Dates: June 1, 1981 to May 16, 1982
Location: Plant Vogtle
Plant Status: Under construction
Job Description: Field Engineering Support -
Construction Department,
Mechanical Field Operations,
Instrumentation Section.

NON-NUCLEAR

Position: Student Engineer
Dates: 5/78-8/78, 5/79-8/79, 12/79-1/80,
5/80-8/80, 12/80-1/81
Location: South Carolina Public Service Authority,
Jefferies Generating Station,
Moncks Corner, SC
Plant Status: Operational
Job Description: Testing of such equipment as
feedwater heaters, installation of
large equipment such as boiler feed
pumps and engineering support for
operations and maintenance.

TRAINING:

NUCLEAR

Course Title: Control Room Management
Dates: April 16, 1984 to April 18, 1984
Total Course Hrs.: 24
Vendor: General Electric
Description: Course designed to improve control
room management personnel's skill
in the areas of observation,
situation appraisal, decision
making and planning.

Course Title: SRO Certification Training
Dates: November 14, 1983 to January 27, 1984
Total Course Hrs.: 292 hrs. classroom, 128 hrs. simulator
Vendor: General Physics Corporation/
Georgia Power Company
Description: Accelerated course on integrated
system operations including
malfunction and accident analysis.

NUCLEAR
(Cont'd)

Course Title: Operations Technology Training
Dates: April 18, 1983 to September 22, 1983
Total Course Hrs.: 784 hrs. classroom, 132 hrs. simulator
Vendor: General Physics Corporation/
Georgia Power Company
Description: Basics of heat transfer, fluid
flow, chemistry, health physics
and nuclear theory; system
operations, technical specifications,
normal and emergency operating
procedures; six weeks of simulator
training.

Course Title: Advanced Simulator Training
Dates: November 17, 1982 to November 19, 1982
Total Course Hrs.: 24
Vendor: Westinghouse
Description: Operational consideration of
pressurized thermal shock in reactor
vessels.

Course Title: Nuclear Environmental
Qualification Seminar
Dates: October 12, 1981 to October 22, 1981
Total Course Hrs.: 24
Vendor: Wyle Laboratories
Description: Seminar presented requirements
for qualification of safety related
equipment and the rationale and
current practices for meeting these
requirements.

Course Title: PWR System Summary
Dates: August 1981
Total Course Hrs.: 40
Vendor: General Physics
Description: PWR Systems and Operation

Course Title: Plant Equipment Operator Training
Dates: June 8, 1981 to June 12, 1981
Total Course Hrs.: 80
Vendor: Georgia Power Company
Description: Training included: BWR theory
and operations, health physics,
respirator training and fire
fighting training

NON-NUCLEAR

Course Title:	Labor Relations
Dates:	May 15, 1984 to May 17, 1984
Total Course Hrs.:	24
Vendor:	Georgia Power Company
Description:	Course described management labor interface, contract language and interpretation and grievance arbitration process.
Course Title:	Technical Communications
Dates:	April 23, 1984 to April 27, 1984
Total Course Hrs.:	40
Vendor:	Nilsson Professional Consulting
Description:	Course designed to improve individuals interpersonal communications, business letter writing, presentation of briefings and self-management techniques.
Course Title:	Principles of Leadership
Dates:	April 2, 1984 to April 6, 1984
Total Course Hrs.:	40
Vendor:	Georgia Power Company
Description:	A participative learning and practice oriented course designed to develop participants personal leadership techniques.

DATE: February 13, 1985

RE: Plant Vogtle - Units 1 & 2
Observation Training - Farley Nuclear Plant
July 8, 1984 thru January 2, 1985
Training Summary

FROM: M. B. Lackey

TO: J. E. Swartzwelder

During my six months training program at Plant Farley, I was able to observe and participate in many operational activities. I spent time at each of the licensed positions, both SRO and RO, and at each of the non-licensed Operator positions. I also spent time with Chemistry, Counting Room and Health Physics personnel.

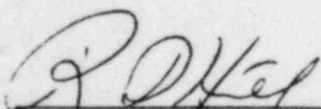
I witnessed a unit shutdown when a review of Westinghouse inservice test data revealed two steam generator tubes with degraded wall thickness. The unit was shutdown, Reactor Coolant System drained to mid-plane, a helium leak check performed on each steam generator with eddy current tests performed on any tubes detected to leak and all adjacent tubes. All degraded tubes were plugged, Reactor Coolant System was then filled and vented and a unit start-up performed.

I observed several load shed operations required by system voltage swings and one due to a wiped bearing on an isophase bus duct cooling fan.

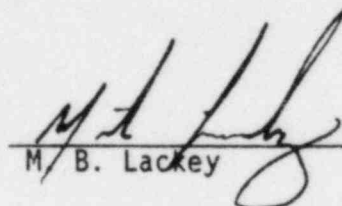
I witnessed a unit start-up after trip when an operator error during an RPS surveillance test resulted in a unit trip from 100% power.

I was able to observe and participate in fuel handling operations. I assisted Operations and Reactor Engineering personnel unload, inspect and place in storage several shipments of new fuel assemblies. I also observed movement of irradiated fuel in the spent fuel pool to accommodate the reracking of the pool which I was also able to observe.

Five Vogtle RO's and one STA were assigned to Farley for three months during my stay. We spent considerable time comparing Farley and Vogtle through both systems and procedures.



Operations Superintendent
Farley Nuclear Plant



M. B. Lackey

RESUME

NAME: J. Anthony (Tony) Dobbs
DATE OF BIRTH: August 11, 1958
DATE EMPLOYED: July 6, 1982
TITLE: Shift Supervisor
EDUCATION: B. S. Electrical Engineering
University of Tennessee-1981
LICENSE/CERTIFICATIONS: SRO Instructor (Vogtle) Certified by NRC,
January, 1982.
Engineer-In-Training Certificate - 1980

WORK EXPERIENCE:

SUMMARY 2 1/2 years nuclear power experience (by use
of weighting factors).

NUCLEAR (GPC)

Position:	Shift Technical Advisor- SRO Certification
Dates:	September 1983 - Present
Location:	Plant Vogtle, Burke Co., GA
Plant Status:	Under Construction & Startup
Job Description:	I was responsible for co-ordinating both license and non-license training programs with the Training Department. I instructed SRO Certification candidates in both the classroom and simulator in preparation for NRC, SRO certification exams. I supervised all Plant Operators, Assistant Plant Operators, and Plant Equipment Operators while in Training. I continued to test the simulator fidelity during normal, abnormal and emergency situations.
Position:	Simulator Engineer
Dates:	July 1982 -September 1983
Location:	Plant Vogtle
Plant Status:	Under Construction & Startup
Job Description:	I was responsible for full-scope testing of the simulator with regard to proper dynamic simulation. This included research, testing, and modification. I also instructed students and SRO Certification candidates in the classroom and simulator, in preparation for their NRC Certification exams.

Resume

J. Anthony (Tony) Dobbs

Page 2

NUCLEAR (OTHER)

Position: Associate Engineer
Dates: February 1982 - July 1982
Location: Plant Vogtle
Plant Status: Under Construction & Startup
Job Description: I performed on-site acceptance testing of the simulator after delivery in March 1982. During This period I also instructed SRO certification candidates during the classroom phase.

Position: Staff Specialist
Dates: January 1981 - February 1982
Location: General Physics Corporation
Chattanooga, Tennessee
Job Description: I was a technical writer responsible for several sections of the Plant Vogtle training text. From October through February I was one of a 4-man team responsible for factory acceptance of the simulator in Silver Springs, MD.

TRAINING:

NUCLEAR

Course Title: Pressurizer Water Reactor Technology
Dates: March 1981 - May 1981
Total Course Hrs.: 440
Vendor: General Physics Corporation
Description: This course consisted of 8 weeks of PWR theory and systems classroom instruction and 3 weeks simulator instruction at the Plant Sequoyah Simulator in Chattanooga, TN.

DATE: March 8, 1985

RE: Plant Vogtle - Units 1 & 2
Observation Training - Sequoyah Nuclear Plant
Training Summary

FROM: J. Anthony Dobbs

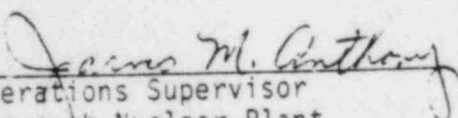
TO: J. E. Swartzwelder

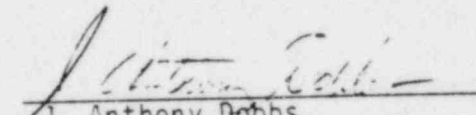
From January 15, 1985 until February 22, 1985 I was assigned to Sequoyah Nuclear Plant. My assignment for the six-week period was to observe the Operations Department and gain Hot Participation experience at a commercial nuclear (PIIP) power plant.

During my six-week assignment I satisfactorily completed the Hot participation check-list which includes: observation and study of many operating and surveillance procedures, observing key operations personnel to understand their job responsibilities, and observing and discussing several plant manipulations with the shift personnel. During my assignment period I was also able to observe the annual Radiological Emergency Preparedness Drill. Although both units were in Mode 1 for my entire stay I did observe a power increase from 30 to 80 percent power.

I wish to gratefully acknowledge the helpfulness and cooperation of the Sequoyah Operations Department. The hospitality and patience shown by the Operations personnel created an atmosphere of rapid learning.

I have asked the Operations Supervisor to read this experience summary and, agreeing to its contents, give his signature below.


Operations Supervisor
Sequoyah Nuclear Plant


J. Anthony Dobbs

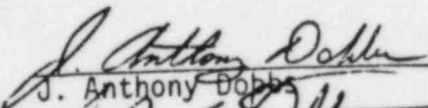
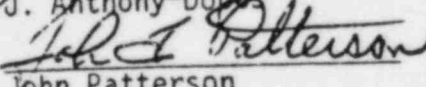
DATE: December 23, 1984
RE: Plant Vogtle - Units 1 & 2
Offsite Training Experience
FROM: J. Anthony Dobbs
TO: Training File

Plant Callaway Startup and Initial Fuel Load

From May 7 until July 20, 1984 Mr. Dobbs observed and/or actively participated in startup and initial fuel load activities at Plant Callaway. These activities include: Mode change requirement reviews, initial system lineups for Mode 6, and Operational Surveillance Testing of systems to include: ECCS Subsystems, Containment Spray System, Fire Protection Systems, Control Room Emergency Ventilation System, Emergency Diesel Generators, Auxiliary Feedwater System, Essential Service Water System, and Solid State Protection System. Mr. Dobbs also observed initial fuel loading of approximately 103 fuel bundles and participated in operability testing of the refueling machine and the spent fuel pool bridge crane.

Plant Callaway Initial Criticality and Low Power Testing

From September 24 until October 10, 1984 Mr. Dobbs observed and/or actively participated in activities leading to initial criticality and low power reactor physics testing. These activities include: Operational Surveillance Testing, Modes 1 & 2 System Lineup Verifications, NIS Operability Tests, Dilution to Initial Criticality, and Control Rod Worth Testing using the Westinghouse Reactivity Computer.


J. Anthony Dobbs

John Patterson
Acting Supt. of Operations

RESUME

NAME: William (Bill) Mark Watkins, Jr.
DATE OF BIRTH: December 5, 1949
DATE EMPLOYED: June 1, 1981
TITLE: ~~Associate Engineer (STA Plant E. I. Hatch)~~ *Shift Supv.*
EDUCATION: Associate of Aviatric Technology, South Georgia
Technical & Vocational School, 1974
Bachelor of Science In Mechanical Engineering
University of Alabama, Huntsville, Alabama, 1981
LICENSE/CERTIFICATIONS: Shift Technical Advisor, Plant Hatch
Engineer In Training
Airframe & Power Plant Mechanic License
Aircraft Inspection Authorization (Exp. 1982)
Aircraft Pilots License

WORK EXPERIENCE:

SUMMARY

Three years Georgia Power Nuclear
One year on loan to Vogtle Construction
Two years Vogtle Power Generation (6 months Hatch)
Ten years aircraft maintenance
Six years Ag. and other light single and twin
Four years turbine and pure jet; Aircraft inspection

NUCLEAR (GPC)

Position: Associate Engineer, Power Gen.
Dates: October 1983 - Present
Location: Plant E.I. Hatch
Plant Status: Units 1 & 2 Commercial
Job Description: STA training, Rx Engineering training.

Position: Associate Engineer,
Power Generation
Dates: June 1982 - Oct. 1983
Location: VEGP
Plant Status: Under construction
Job Description: June 28 to Feb. 1983 -
Responsible for determining
needs of plant machine shop
and preparing summary for
management approval. Evaluated
needs and made changes to
permanent warehouse interior
layout and storage equipment.
Wrote maintenance procedures.

Resume
William (Bill) Mark Watkins, Jr.
Page Two

WORK EXPERIENCE:

NUCLEAR (GPC) CONTINUED

February 1983 - Oct. 1983
Attend operation training,
write Operations procedures.

Position: Jr. Engineer, Power Generation
Dates: June 1, 1981
Location: VEGP
Plant Status: Under construction
Job Description: Loaned to Construction Dept.
June 26, 1981 to June 28, 1982
Field Coordination - Coordinated
setting of permanent plant
equipment.

NUCLEAR (OTHER)

None

NON-NUCLEAR (GPC)

None

NON-NUCLEAR (OTHER)

Position: Aircraft Mechanic & Inspector
Dates: June, 1973 - June 1981
Location: Various locations throughout
Alabama, Georgia & South Carolina.
Plant Status: N/A
Job Description: General aviation maintenance,
inspection and repair.

TRAINING:

NUCLEAR (GPC)

Course Title: Control Room Management
Dates: April 13 - April 16, 1984
Total Course Hrs.: 24 hrs.
Vendor: General Electric
Description: Control Room/operations related
problem solving.
Course Title: Shift Technical Advisor Training
Dates: Oct. 1983 - March 1984
Total Course Hrs.: 10 weeks classroom,
4 weeks simulator
Vendor: General Physics
Description: BWR Plant Training
Course Title: Vogtle Operations Training
Dates: Feb. 6, 1983 - July, 1983
Total Course Hrs.: 17 weeks classroom
5 weeks simulator
Vendor: GPC Nuclear
Description: PWR plant training

Resume
William (Bill) Mark Watkins, Jr.
Page Three

TRAINING

NUCLEAR (GPC) CONT'D

Course Title: Technical Communications
Dates: May 11, 1982 - May 14, 1982
Total Course Hrs.: 32 hrs.
Vendor: GPC, Nilsson Professional Consulting, Inc.
Description: Procedure writing, technical writing, letters, briefings and meetings.

Course Title: Visual Inspector, Level I
Date: April, 1982
Total Course Hrs.: 40
Vendor: GPC Construction Training Dept.
Description: Visual Welding Inspector

Course Title: Rotating Equipment
Date: March, 1982
Total Course Hrs.: 40
Vendor: GPC Const. Dept. Training
Description: Setting & aligning rotating equipment.

Course Title: Post Tension Seminar
Date: January, 1982
Total Course Hrs. 8
Vendor: Bechtel
Description: Post-Tension System

Course Title: Startup Workshop
Dates: January, 1982
Total Course Hrs.: 8
Vendor: Ga. Power Co.
Description: Startup oriented

Course Title: Inspection of Cleaning & Flushing
Dates: December, 1981
Total Course Hrs.: 20
Vendor: Ga. Power Co., Const. Training Dept.
Description:

Course Title: Setting of Electrical Equipment
Dates: December, 1981
Total Course Hrs.: 12
Vendor: Ga. Power Co. Const. Dept. Training
Description:

Course Title: Lifting, Handling, and Rigging
Dates: November, 1981
Total Course Hrs.: 40
Vendor: Ga. Power Co., Const. Dept. Training (on-site)
Description:

Resume

William (Bill) Mark Watkins, Jr.

Page Four

TRAINING:

NUCLEAR (GPC) CONT'D

Course Title: Startup Workshop
Dates: November, 1981
Total Course Hrs.: 8 hrs.
Vendor: Ga. Power Co.
Description: Startup oriented

Course Title: Startup Workshop
Dates: September, 1981
Total Course Hrs.: 8 hrs.
Vendor: Ga. Power Co.
Description:

Course Title: PWR Course
Dates: September, 1981
Total Course Hrs.: 40 hrs.
Vendor: General Physics
Description:

NON-NUCLEAR (GPC)

None

NON-NUCLEAR (OTHER)

Course Title: Aircraft Mechanics School
Dates: Sept. 1972 - Sept. 1974
Total Course Hrs.: 2800 hrs.
Vendor: South Georgia Tech. & Voc. School
Description: Course to prepare for FAA
aircraft mechanics license.

DATE: October 12, 1984
RE: Plant Vogtle - Units 1 & 2
Training Summary - V. C. Summer Nuclear Station
FROM: W. M. Watkins
TO: J. E. Swartzwelder

I was stationed at the V. C. Summer Nuclear Station from 07/09/84 to 10/04/84 in accordance with VEGP 10015-C, Hot Participation Experience Program. During this period I worked the same shift rotation as the host and was able to gain enlightening experience at an operating PWR.

In addition to observing and assisting the operations staff perform normal surveillance and operations task, I was able to participate in the following evolutions: 2 planned shutdowns (mode 1 to mode 3), 1 Rx trip from 10% power, 2 reactor startups (mode 3 to mode 1), 6 power changes of >10%, plugging and testing of leaking steam generator tubes during a brief steam generator outage, CVCS valve line up inside Reactor Building (charging, letdown, RCP seals), RCS venting, reactor coastdown 100% to 65% power (ARO, Oppm, 5°F depressed Tave), unloading and handling of new fuel, RCS degassing, plant drills, and assisting the Reactor Engineer in various task.

I have completed the detailed V. C. Summer Observation Training Checklist, filed bi-weekly offsite experience reports, and maintained a daily activity log.

The Hot Participation Experience Program has allowed me to gain an insight into the daily operation of a PWR that should be of real benefit during startup and commercial operation at VEGP. The staff at VCS could not have been any more considerate or helpful during my stay.

W. M. Watkins

WMW/vsj

Site Coordinator

Thomas S. Stange

VCS SRO

Ray E. Williams

RESUME

NAME: William R. (Bill) Dunn, Jr.
DATE OF BIRTH: May 22, 1953
DATE EMPLOYED: January 17, 1977
TITLE: ~~Shift Foreman~~ *SHIFT SUPERVISOR*
EDUCATION: Three years at University of Georgia
Major: Microbiology

LICENSE/CERTIFICATIONS: RO Licensed by NRC April 14, 1982
SRO CERTIFIED By NRC March 4, 1985

WORK EXPERIENCE:

SUMMARY

8 years nuclear power plant experience
(3 1/2 years using weighting factors)
Participated in BWR startup and preoperational
testing Hatch Unit II. *SUPERVISING INITIAL TEST PROGRAM ACTIVITIES*
FOR PWR VOGTLE UNIT I.

NUCLEAR (GPC)

→ SEE SHEET ATTACHED

Position: Shift Foreman
Dates: 3/17/84 -- ~~Present~~ *7/21/84*
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under construction & startup
Job Description: Presently attending SRO
certification school.
Responsible for initial
test program support duties
and supervision of startup
test activities.

Position: Plant Operator - Plant Vogtle
Dates: June 6, 1983 - March 17, 1984
Location: Plant Vogtle
Plant Status: Under construction & startup
Job Description: Responsible for safe and
efficient operation of plant
during initial test program
and commercial operation.
Attending SRO certification
school.

Position: Assistant Plant Operator
RO licensed, Plant Hatch
Dates: April 14, 1982 - Jan. 2, 198
Location: Plant Hatch, Appling Co., Ga.
Plant Status: Units 1 & 2 in commercial
operation
Job Description: Responsible for direct
manipulation of reactor controls,
control room equipment and
daily surveillance of control
room equipment and testing of
plant equipment. Also responsible
for handling of nuclear fuels.

NUCLEAR (GPC)
CONT'D

Position: Assistant Plant Operator
Dates: April 10, 1978 - April 14, 1982
Location: Plant Hatch, Appling Co., Ga.
Plant Status: Commercial Operation
Job Description: Responsible for safe and efficient operation of both units radiological waste processing systems used for cleanup and reprocessing of water used in plant.

Position: Plant Equipment Operator
Dates: Jan. 17, 1977 - April 10, 1978
Location: Plant Hatch, Appling Co., Ga.
Plant Status: Unit 1 in commercial operation, Unit 2 under construction and startup testing. Perform daily surveillance and operation of equipment outside of main control room.

NON-NUCLEAR

None

TRAINING

NUCLEAR
SEE ATTACHED SHEET

Course Title: RO Licensing School
Dates: 8/80 - 2/82
Total Course Hrs.: 18 months
Vendor: Georgia Power Company
Description: A Georgia Power Company plant specific course designed to acquaint the student with BWR technology and systems for the purpose of obtaining a Reactor Operators License from the NRC and operating two 800 MWE BWR units.

Course Title: Q. A. Training
Dates: January 1977
Total Course Hrs.: 8 hrs.
Vendor: Georgia Power Company
Description: Familiarize personnel with GPC Quality Assurance Goals and requirements necessary for the operation of a nuclear power facility.

TRAINING

NUCLEAR (CONT'D)

Course Title: General Electric Simulator
Certification
Dates: January 1982
Total Course Hrs.: 40 hrs.
Vendor: General Electric Company
Description: Training and testing
necessary to demonstrate
student's ability to
properly respond and
predict a nuclear reactor's
response during startup.

Course Title: ATTS School
Dates: May 1983
Total Course Hrs.: 8 hrs.
Vendor: General Electric Company
Description: Program of training
necessary to acquaint reactor
operator's with the design
and function of the analog
transmitter and trip
system.

Course Title: FSAR School
Dates: October 1983
Total Course Hrs.: 8 hrs.
Vendor: Southern Company Services
Description: Discussion of transient and
accident analyses used in
the FSAR and use of plant
procedures to ensure operation
of reactor within analyzed
modes of operation.

NON-NUCLEAR

SEE ATTACHED SHEET

Course Title: High Voltage Switchyard
and Switching
Dates: November 1979
Total Course Hrs.: 40 hrs.
Vendor: Georgia Power Company
Description: Program designed to acquaint
personnel with high voltage
substation design and operation.

(GRC)

POSITION: SHIFT SUPERVISOR
DATES: 7/21/84 - PRESENT
LOCATION: PLANT VOGTLE, WAYNESBORO, GA
PLANT STATUS: UNDER CONSTRUCTION AND INITIAL TEST PROGRAM
JOB DESCRIPTION: SUPERVISING THE DAILY ACTIVITIES OF SHIFT PERSONNEL. COORDINATING THE SHIFT OPERATOR SUPPORT FOR THE INITIAL TEST PROGRAM FOR VOGTLE UNIT I. RESPONSIBLE FOR SCHEDULING PERSONNEL FOR SHIFT ACTIVITIES. SERVING AS OPERATIONS DEPT. LIAISON TO TRAINING DEPT FOR REACTOR OPERATORS CLASSES.

PRESENT ASSIGNED TO THE SEQUOYAH NUCLEAR PLANT FOR HOT PARTICIPATION TRAINING.

(110)

NUCLEAR.

COURSE TITLE: CONTROL ROOM MANAGEMENT

DATES:

TOTAL COURSE HRS:

VENDOR: GENERAL ELECTRIC

DESCRIPTION: PROGRAM OF TRAINING TO ACQUAINT SUPERVISORS WITH PROPER METHODS TO ANALYSE PROBLEMS AND PROPER METHOD TO RESOLVE PROBLEMS IN A NUCLEAR PLANT.

NUCLEAR:

COURSE TITLE: NEW SUPERVISOR SCHOOL

DATES: 8/13/84 - 8/17/84

TOTAL COURSE HRS: 40 HRS

VENDOR: GEORGIA POWER COMPANY

DESCRIPTION: PROGRAM TO ORIENT NEW SUPERVISORS TO METHODS TO BE AN EFFECTIVE SUPERVISOR FOR GEORGIA POWER COMPANY

NUCLEAR

COURSE: SRO CERTIFICATION COURSE

DATES: 1/2/84 - 6/13/84

TOTAL COURSE HRS: 5 MONTHS

VENDOR: GEORGIA POWER COMPANY / GENERAL PHYSICS CORP.

DESCRIPTION: A GEORGIA POWER COMPANY PLANT SPECIFIC COURSE DESIGNED TO ACQUAINT THE STUDENT WITH PWR TECHNOLOGY AND SYSTEMS FOR THE PURPOSE OF OBTAINING A SRO INSTRUCTOR CERTIFICATION.

RESUME

NAME: John D. Hopkins
DATE OF BIRTH: April 29, 1957
DATE EMPLOYED: July 5, 1977
TITLE: Shift Supervisor (SRD/CER+)
EDUCATION: 1 1/3 years Augusta College
LICENSE/CERTIFICATIONS: Senior Reactor Operator Certification, 8/84, Vogtle Project
Reactor Operator License received 4/82 for Hatch 1 and 2

WORK EXPERIENCE:

SUMMARY: 6 3/4 years power plant experience
(Commercial Power Plant)
(42 1/4 months with weighting factors)

NUCLEAR (GPC)

Position: Shift Supervisor
Dates: August 1984 - Present
Location: Plant Vogtle, Burke Co., GA
Plant Status: Under Construction and Startup
Job Description: Direct operators on shift during CAT, and startup. Assigned to C/R Design Modifications/Human Factor Group.

Position: Shift Foreman-In-Training
Dates: March 17, 1984 - August 1984
Location: Plant Vogtle, Burke Co., GA
Plant Status: Under Construction and Startup
Job Description: Attending SRO certification school and assigned to C/R Design Modifications/Human Factors group.

Position: Plant Operator
Dates: January 1984 - March 17, 1984
Location: Plant Vogtle, Burke Co., GA
Plant Status: Under Construction and Startup
Job Description: Attend SRO Certification School.

NUCLEAR (GPC)
CONT'D

Position: Assistant Plant Operator Reactor
Operator License
Dates: April 1982 - December 1983
Plant Status: Commercial Operation
Job Description: Duties consist of Control Room
Operation of Unit 2 BWR under
normal and transit conditions,
normal startup, shutdown and
refueling operations the refueling
flow and in Control Room.

Position: Assistant Plant Operator
Dates: October 1979 - April 1982
Location: Plant Hatch
Plant Status: Commercial Operation
Job Description: Duties consist of operation
of radwaste facilities including
liquid and solid waste processing.
During this time I attended
the Hatch RO license school
for RO license preparation.

Position: Plant Equipment Operator
Dates: July 1977 - October 1979
Location: Plant Hatch
Plant Status: Commercial Operation
Job Description: Daily check of remote equipment
and remote equipment operation.

TRAINING

NUCLEAR

Course Title: Substation Operation
Dates: January 1980
Total Course Hrs.: 40
Vendor: GPC
Description: Design and operation of 230/500
kv switchyard

Course Title: Turbine Generator Operation
Dates: November 1982
Total Course Hrs.: 40
Vendor: Spectrum Technical Training
Description: Design, operation and construction
of Turbine Generator and auxillary
systems required for T-G startup,
shutdown and operation.

TRAINING

NUCLEAR (CONT'D)

Course Title: Basic Nuclear Preparation
Dates:
Total Course Hrs.: 320 hrs.
Vendor: GPC
Description: This course is designed to prepared personnel in basics needed to enter the license program. Studies consisted of instruction in mathematics, classical physics, chemistry, electricity and heat transfer.

Course Title: Physics
Dates:
Total Course Hrs.: 320 hrs.
Vendor: GPC
Description: Study is structured to provide instruction in Nuclear Theory and Operation. Subjects included Nuclear Physics, Radiation Detection and Shielding, Core Physics, Reactor Operations and operating Characteristics.

Course Title: Basic Technology
Dates:
Total Course Hrs.: 240 hrs.
Vendor: GPC
Description: This course provides a technical understanding of the design and operating characteristics of a BWR. Material studied includes Thermodynamics, Fluid Mechanics, Heat Transfer, Health Physics, and Nuclear Instrumentation.

Course Title: Reactor Technology
Dates:
Total Course Hrs.: 400 hrs.
Vendor: GPC
Description: This provides a technical knowledge of the Plant E. I. Hatch systems including all safety systems and operational settings.

TRAINING

NUCLEAR (CONT'D)

Course Title: BOP Systems
Dates:
Total Course Hrs.: 480 hrs.
Vendor: GPC
Description: This study reviews the Plant Technical Specifications and introduces plant familiarization in the field.

Course Title: Simulator or on-the-job
Dates:
Total Course Hrs.: 320 hrs.
Vendor: GPC
Description: This is a 20 week phase of training which includes 8 wks. study and observation in the plant and a 12 week observation of control room operations. This phase of training includes all normal duties of control room work, field work, maintenance preparation and assistance with various tests. Control manipulations are performed on both the simulator and in the control room.

Course Title: Walkthru and Evaluation
Dates:
Total Course Hrs.: 320 hrs.
Vendor: GPC
Description: This study involves Training Department walkthru's followed by vendor evaluations.

Course Title: Reactor Startup Qualification
Dates:
Total Course Hrs.: 40 hrs.
Vendor: General Electric Corp.
Description: (G.E. hot license certification)

TRAINING

NUCLEAR (CONT'D)

Course Title: SRO Certification Program Plant Vogtle
Dates: January 1984 - July 1984
Total Hrs. 1120 hrs.
Vendor: GPC; General Physics
Description: Prepare SRO candidates for certification Basic PWR Theory, Design, and Operations with 8 weeks of Simulator Training.

OTHER

Course Title: Introduction to Supervision
Dates: 8/12/84 - 8/16/84
Instructor: GPC
Description: Introduction to basic skills required for supervision.

Course Title: Control Room Design Review
Dates: September 1984
Instructor: GPC - E. Kozinsky
Description: Orientation of CRDR Team Personnel on principles of Human Engineering and provide overview of indoctrination of CRDR with specific instruction on the methodologies utilized in the CRDR.

RESUME

NAME: Samuel Blair Poteate, III

DATE OF BIRTH: June 5, 1957

DATE EMPLOYED: June 22, 1981

TITLE: Shift Supervisor

EDUCATION: Bachelor of Science in Mechanical Engineering from
Virginia Polytechnic Institute & State University

LICENSE/CERTIFICATIONS: STA Certification (Hatch) by GPC, October, 1982
Engineer In Training (VA.), 1981
New Fuel Inspection Certification by
General Electric, September, 1983

WORK EXPERIENCE:

SUMMARY

3 years power plant experience
3 years nuclear power plant experience (3 yrs., 4 mos.
using weighting factors)
Participated in startup, shutdown, power operation,
and refueling at Plant Hatch, 1982-1984
Worked as Undergraduate Research Assistant in
the Turbomachinery Department at VPI &SU.

NUCLEAR (GPC)

Position:	Shift Supervisor
Dates:	March 17, 1984 - Present
Location:	Plant Vogtle, Burke Co., Ga.
Plant Status:	Under construction & startup
Job Description:	On temporary assignment at Plant Hatch until May, 1984. Hatch assignments involve STA and Reactor Engineering responsibilities that include: STA-Required to maintain an STA Certification and perform the duties of STA on shift that include, performing transient analysis, investigat- ing abnormal or unusual operat- ing events, being present in the control room during all planned evolutions (e.i. turbine testing, MSIV surveillance, rod pattern adjustments, startup, shut- down, load changes, etc). Serve in advisory capacity to the Operations Supervisor.

WORK EXPERIENCE

NUCLEAR (GPC) CONTINUED

Reactor Engineering-
monitor control rod depletion,
schedule purchasing and
replacement of control rods,
nuisance annunciator control
program, writing and engineer-
ing review of plant procedures,
coordination of NUCLEAR
NETWORK program, control
rod scram time analysis program.

Position: Shift Technical Advisor
Dates: January 2, 1983 - March 17, 1984
Location: Plant Hatch, Baxley, Ga.
Plant Status: Full power operation, Units 1 & 2
Job Description: STA and Reactor Engineering
responsibilities as described
above under Shift Supervisor.

Position: Associate Plant Engineer
Dates: December 25, 1982 - Jan. 2, 1983
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under construction
Job Description: On temporary assignment to
Plant Hatch to perform STA
and Reactor Engineering duties
as described above under Shift
Supervisor.

Position: Plant Equipment Operator
(during employee strike)
Dates: July 8, 1981 - July 27, 1981
Location: Plant Hatch, Baxley, Ga.
Plant Status: Power Operation, Units 1 & 2
Job Description: Inspection and data recording
of operating equipment in
the Reactor, Turbine, and
Control Buildings.

Position: Junior Plant Engineer
Dates: June 22, 1981 - Dec. 24, 1982
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under construction
Job Description: FSAR review, development of
Plant Vogtle, Plant Hatch,
and Georgia Power Corporate
emergency plans.

WORK EXPERIENCE:

NUCLEAR (GPC) CONT'D

Participate in Hatch STA training program.

NUCLEAR (OTHER)

None

NON-NUCLEAR (GPC)

None

NON-NUCLEAR (OTHER)

Position:

Undergraduate Research Assistant in the Turbomachinery Department at VPI & SU

Dates:

March 1981 - June 1981

Job Description:

Provided research assistance to Ph.D candidates and faculty members in the Turbomachinery Lab.

TRAINING:

NUCLEAR

Course Title:

Turbine Generator Training

Dates:

August 1984

Total Course Hrs.: 40 hrs.

Vendor:

Spectrum Technical Training, Inc.

Description:

Design and operation of Plant Vogtle main turbine generator, turbine generator auxiliaries, and the steam generator feed pump turbine.

Course Title:

Plant Hatch STA Certification

Dates:

August 9, 1982 - October 24, 1982

Total Course Hrs.: 11 weeks

Vendor:

General Physics

Description:

A detailed study of Plant Hatch systems and operation, BWR reactor physics, BWR thermal hydraulics, operating and abnormal operating procedures, and plant Technical Specifications. The course included 6 weeks of classroom instruction and 5 weeks of Plant Hatch simulator instruction. Testing consisted of weekly tests as well as an STA Certification written examination and a simulator oral examination at the end of the course.

TRAINING:

NUCLEAR (CONT'D)

Course Title: On-The-Job Reactor Engineering Training
Dates: October 1982 - December 1982
Total Course Hrs.: 7 ½ weeks
Vendor: N/A
Description: This on-the-job training consisted of working regular shift hours with an existing STA/Reactor Engineer and detailed study in the areas of Reactor Physics, nuclear instrumentation, power distribution calculations, core flow determinations, Technical Specifications, process computer, Preconditioning Interim Operating Management Recommendations (PCIMR), control rod pattern sequence development, and operating strategies.

Course Title: New Fuel Inspection
Dates: September 22, 1983
Total Course Hrs.: 8 hrs.
Vendor: General Electric
Description: Instruction on inspection methods and acceptance criteria for new fuel. Personnel with this training are required to inspect all new fuel as it arrives on site, prior to placement in the fuel pool.

Course Title: Plant Vogtle STA Training
Dates: March 1, 1982 - July 26, 1982
Total Course Hrs.: 22 weeks
Vendor: General Physics
Description: A detailed study of Plant Vogtle systems and operation, PWR reactor physics, operating procedures. The course included 15 weeks of classroom instruction and 7 weeks of Plant Vogtle simulator instruction. Testing consisted of daily quizzes, weekly tests as well as written and oral simulator examinations at the end of the course.

TRAINING:

NUCLEAR (CONT'D)

Course Title: PWR Orientation Course
Dates: Sept. 14, 1984 - Sept. 18, 1984
Total Course Hrs.: 40 hrs.
Vendor: General Physics
Description: PWR fundamentals and systems

NUCLEAR (OTHER)

Course Title: Technical Communications
Dates: April 23, 1984 - April 27, 1984
Total Course Hrs.: 40 hrs.
Vendor: Nilson Professional Consulting, Inc.
Description: Technical writing, preparing and presenting briefings and technical presentations, stress management, meetings management, self management, and interpersonal communications.

Course Title: Managing in a Changing Environment
Date: May 8, 1984
Total Course Hrs.: 8 hrs.
Vendor: Nilson Professional Consulting, Inc.
Description: Communication skills, coaching, self confidence, and stress management.

Course Title: New Supervisors Schools
Dates: May 21, 1984 - May 25, 1984
Total Course Hrs.: 40 hrs.
Vendor: N/A, Georgia Power Company
Description: Effective communication skills and techniques, positive and negative feedback, employee compliants, Georgia Power Company Human Resources procedures.

Course Title: Labor Relations Training
Dates: September 27, 1984
Total Course Hrs.: 8 hrs.
Vendor: N/A, Georgia Power Company
Description: Labor contract interpretation and implementation.

RESUME

NAME: Cecil H. (Hank) Williams, Jr.
DATE OF BIRTH: May 20, 1955
DATE EMPLOYED: June 27, 1977
TITLE: Shift Supervisor (SR0 /CERT)
EDUCATION: University of Central Florida Engineering College
approx. 2 years, 1972 - 1974
LICENSE/CERTIFICATIONS: Reactor Operator License for Plant Hatch Unit 1 & 2
Received on April 14, 1982

WORK EXPERIENCE:

SUMMARY

6.75 years nuclear plant experience
(12 1/2 mos. using weighting factors)

NUCLEAR (GPC)

Position: Shift Foreman
Dates: 3-17-84 - Present
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under construction and startup
Job Description: Attend SRO school. Responsible for writing and reviewing initial plant procedures.

Position: Plant Operator
Dates: June 1983 - March 17, 1984
Location: Plant Vogtle, Burke Co., Ga.
Plant Status: Under construction and startup
Job Description: Attend SRO school.

Position: Assistant Plant Operator
Dates: 10/79 to 6/83
Location: Plant Hatch, Appling Co., Ga.
Plant Status: Commercial Operation
Job Description: Operate radioactive waste facility from 10/79 to 8/80. Attend Reactor Operator license school from 8/80 to 4/82. Obtained Reactor Operator license. Perform control room license duties from 4/82 to 6/83.

Position: Plant Equipment Operator
Dates: 6/77 to 10/79
Location: Plant Hatch, Appling Co., Ga.
Plant Status: Commercial Operation
Job Description: Perform operations and surveillance outside of main control room.

TRAINING

NUCLEAR

Course Title: Reactor Operator License
Training
Dates: 8/80 to 2/82
Total Course Hrs.: 18 months
Vendor: GPC and General Physics
Description: Training leading to reactor
operator license.

Course Title: Quality Assurance
Dates: August, 1977
Total Course Hrs.: 8 hrs.
Vendor: Georgia Power Company
Description: To familiarize personnel with
the Georgia Power Co. quality
assurance goals and requirements
necessary for the operation of
a nuclear power facility.

Course Title: General Electric Simulator
Certification
Dates: January 1982
Total Course Hrs.: 40 hrs.
Vendor: General Electric Co.
Description: Program of training & testing
leading to General Electric
certification of demonstrated
ability to properly and safely
maintain reactor under control
during startup.

Course Title: ATTS School
Dates: May 1983
Total Course Hrs.: 8 hrs.
Vendor: General Electric Co.
Description: Program of training necessary to
acquaint reactor operators in
the design and function of the
analog transmitter and trip
system.

Course Title: FSAR School
Dates: October 1983
Total Course Hrs.: 8 hrs.
Vendor: Southern Company Services
Description: Discussion of transient and
accident analyses used in the
FSAR and use of plant procedures
to ensure operation of reactor
within analyzed modes of operation.

Resume
Cecil H. (Hank) Williams, Jr.
Page 3

TRAINING

NON-NUCLEAR

Course Title: High Voltage Switchyard
and Switching
Dates: November 1979
Total Course Hrs.: 40 hrs.
Vendor: Georgia Power Co.
Description: Program designed to acquaint
personnel with high voltage
substation design and operation.

RESUME

NAME: M. Wayne Davis

TITLE: Plant Engineer

DEGREE: B.N.E.

DATE OF BIRTH: November 25, 1956

DATE EMPLOYED: September 8, 1980

WORK EXPERIENCE:

NUCLEAR (GPC)	Position:	Plant Engineer
	Dates:	September 8, 1983 - Present
	Location:	Plant Vogtle
	Status:	Construction
	Job Description:	Supervised Reactor Engineering Group Wrote and/or reviewed Engineering Procedures, Refueling Procedures, and Startup Procedures.
		Represented Nuclear Operations at NSSS Interface Meetings. Ga. Power representative for Westinghouse Owners Group. Member of WOG Analysis Subcommittee.
	Position:	Associate Engineer
	Dates:	March 6, 1982 - September 7, 1983
	Location:	Plant Vogtle
	Plant Status:	Construction
	Job Description:	Coordinated review of Reg. Guides and OLSER. Supervised preparation and review of Engineering Procedures.
	Position:	
	Dates:	July 27, 1981 - March 5, 1982
	Location:	Plant Vogtle
	Plant Status:	Construction
	Job Description:	Responsible for Spare Parts Program, researched extended warranties for plant components, reviewed plant drawings, and equipment drawings to assure spare parts coverage, FSAR review, reviewed EPRI evaluation of Pressurizer Safety and Relief Valve Performance.
	Position:	
	Dates:	July 8, 1981 - July 26, 1981
	Location:	Plant Hatch

Plant Status: Operation
Job Description: Strike support, worked as plant equipment operator, checked fluid levels, changed demin resins, operated valves, worked on pumps and screens at intake structure.

Position:
Dates: Feb. 8, 1981 - July 7, 1981
Location: Plant Vogtle
Plant Status: Construction
Job Description: Worked on Spare Parts Program reviewed Recommended Spare Parts Lists.

Position:
Dates: November 18, 1980 - Feb. 7, 1981
Location: Plant Hatch
Plant Status: Operation
Job Description: New fuel inspection, fuel reconstitution, supervised refueling, supervised work on nitrogen purge system, worked in Reactor Systems and in Reactor Engineering.

Position: Jr. Engineer
Dates: Sept. 8, 1980 - November 17, 1980
Location: Plant Vogtle
Plant Status: Construction
Job Description: FSAR review, reviewed startup procedures of other nuclear power plants, worked on environmental report.

NUCLEAR(OTHER)

Dates: March 26, 1983 - March 31, 1983
Oct. 18, 1983 - Oct. 24, 1983
Location: Plant Farley, Dothan, Ala.
Status: Operation
Job Description: Performed Startup Physics Testing including but not limited to Rod Drop/ Time Measurements Flux Maps, Temperature Coefficient Determinations, & Rod Worths (both boration/ dilution method and rod swap method).

Dates: September 18, 1984 - Oct. 7, 1984
Location: Plant Calloway, Fulton, Mo.
Status: Startup
Job Description: Performed Initial Startup Testing beginning with Rod Drop Time Measurements.

NON-NUCLEAR(GPC) NONE

NON-NUCLEAR(OTHER) NONE

TRAINING:

NUCLEAR

Course Title: Vogtle PWR Orientation

Dates: Oct. 6 - 17, 1980

Total Course Hrs: 80 hrs.

Vendor: General Physics

Description: General review of Westinghouse PWR and systems based on Sequoyah Nuclear Plant

Course Title: Health Physics Training

Date: November 11, 1980

Total Course Hrs: 8 hours

Vendor: Georgia Power Co.

Description: H. P. procedures for Plant Hatch

Course Title: Valve Familiarization

Date: May 21, 1981

Total Course Hrs: 8 hours

Vendor: Georgia Power Company

Description: Review of valve mechanics and operations

Course Title: BWR Orientation

Dates: July 1 - 8, 1981

Total Course Hrs: 40 Hours

Vendor: Georgia Power Company

Description: Review of systems at Plant Hatch reactor systems and electrical systems familiarization

Course Title: Station Nuclear Engineer

Dates: 3/12/84 - 5/4/84

Total Course Hrs: 8 Weeks

Vendor: Westinghouse

Description: Fuel Management, Reactor Engineering Procedures INCORE Code, Safety Analysis, Tech Specs. System Transient Response

Course Title: Nuclear Instrumentation System

Dates: 10/12/84 - 10/19/84

Total Course Hrs: 40 Hours

Vendor: Westinghouse

Description: Operation of NIS, Detector Theory, Review of Logic Drawings and Schematics

TRAINING, NUCLEAR (Cont'd.)

Course Title:	STA - type training
Dates:	Oct. 5, 1981 - Jan. 22, 1982
Total Course Hrs:	16 weeks
Vendor:	General Physics
Description:	Detailed course in reactor operations. Reviewed physics, electronics, and thermodynamics. Detailed examination of core physics and transients. Reviewed each system; its layout and its operation. Examined psychology of operations personnel and reviewed management procedures. Reviewed standards for protection against radiation and limits as defined in 10CFR20.

OTHER:

(Applicable to
Power or Related
Industry)

Course Title:	Firefighter training
Dates:	July 6, 1981
Total Course Hrs:	8 Hours
Vendor:	Georgia Power Company
Description:	Use of equipment, rules and regulations, field work included mock fire at cooling towers and actual open fires (wood & chemical).

Course Title:	Respirator training
Dates:	July 7, 1981
Total Course Hrs:	8 Hours
Vendor:	Georgia Power CO.
Description:	Use and maintenance of several different respirator types. Regulations governing which must be used for certain situations.

NOTE:	Passed Engineer-In-Training (EIT) exam.
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