

**Florida  
Power**  
CORPORATION

July 31, 1979

Mr. Walter P. Haass, Chief  
Quality Assurance Branch  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Docket No. 50-302  
Operating License No. DPR-72  
Management & Technical Resources

Dear Mr. Haass:

In response to your letter dated June 29, 1979, requesting technical qualifications of management and technical resources available to handle an event such as the Three Mile Island-2 accident, the following information is being provided:

1. Alphabetized "Technical Qualification" sheets for management and technical personnel;
2. Summarization table showing:
  - a. College education,
  - b. Nuclear experience,
  - c. Management experience,
  - d. Utility experience,
  - e. Nuclear General Review Committee (NGRC),
  - f. Offsite Radiological Support Group (ORS),
  - g. Crystal River Unit #3 plant staff, and
  - h. Emergency Training Operations Group (ETO);
3. Organization chart; and
4. Companies available to offer additional support should it ever become necessary.

It should be noted that, in addition to what is presently being provided, additional management and technical expertise, regardless of departmental lines and position, could be utilized if needed.

262  
7908020473  
456 001

Mr. Walter P. Haass

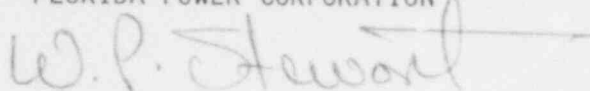
Page 2

July 31, 1979

Should you have any additional questions or need additional information concerning this subject, please contact this office.

Very truly yours,

FLORIDA POWER CORPORATION

A handwritten signature in cursive script that reads "W. P. Stewart". The signature is written in dark ink and extends across the line of the typed name.

W. P. Stewart  
Manager, Nuclear Operations

WPSemhM06  
D47

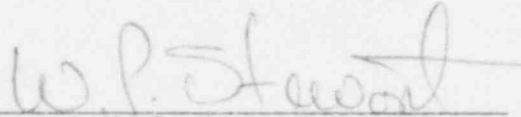
File: 3-0-3-a-3

456 002

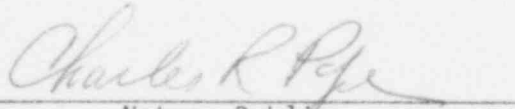


STATE OF FLORIDA  
COUNTY OF PINELLAS

W. P. Stewart states that he is the Manager, Nuclear Operations,  
of Florida Power Corporation; that he is authorized on the part  
of said company to sign and file with the Nuclear Regulatory  
Commission the information attached hereto; and that all such  
statements made and matters set forth therein are true and  
correct to the best of his knowledge, information and belief.

  
\_\_\_\_\_  
W. P. Stewart

Subscribed and sworn to before me, a Notary Public in and for the  
State and County above named, this 31st day of July, 1979.

  
\_\_\_\_\_  
Notary Public

Notary Public, State of Florida at Large,  
My Commission Expires: July 25, 1980

(CRPNotary 1 D12)

456 003

ANCLOTE PLANT

NAME J. William Agee  
TITLE Electrical & Control Engineer  
EDUCATION BSEE

TECHNICAL EXPERIENCE (MAN-YEARS)

- a. ENGINEERING  
(1) ENGINEERING MANAGEMENT  
(2) TOTAL UTILITY EXPERIENCE
- b. FIELD  
(1) ELECTRICAL ENGINEERING  
(2) MECHANICAL ENGINEERING  
(3) MECHANICAL MAINTENANCE  
(4) ELECTRICAL MAINTENANCE  
(5) INSTRUMENT & CONTROL MTCE.  
(6) CHEMISTRY  
(7) POWER PLANT OPERATIONS

11 Years

<u>F</u>	<u>N</u>
	2
	9
	9

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(JWA)D83

456 004

## TECHNICAL QUALIFICATIONS

Mr. J. Alberdi - Manager, Fossil Operations

1. Job Responsibilities

Responsible to the Assistant Vice President, Power Production, for the safe, efficient, and dependable operation and maintenance of fossil generating facilities. This position also provides preoperational planning and representation for new fossil generating units. It supports and implements Company, public, and employee relations programs.

2. Education

Bachelor of Mechanical Engineering, University of Florida - 1958

3. Nuclear Training

Total of 56 weeks (1.1 year) of classroom training, including phase 1, 2, 3, 4, 5, and 6 as stated in Section 12.2.

4. Nuclear Experience

Total of 7.0 years of Nuclear experience including design supervision, startup and testing and practical operating experience.

5. Summary

Mr. J. Alberdi, Manager of Fossil Operations, graduated from the University of Florida in 1958 with a Bachelor's Degree in Mechanical Engineering. Since his graduation, he has served in the Production Department of Florida Power Corporation, in the positions of Assistant Production Engineer, Plant Mechanical Engineer, Assistant Plant Superintendent, Nuclear Plant Superintendent, Nuclear Project Manager, and Manager of Fossil Operations. He has had extensive experience in the areas of Plant Performance, Instrumentation and Controls, Equipment Performance, Operations & Maintenance, and management of personnel. He was very active in the preoperational and startup activities of FPC's fossil units at Turner #4 (75 MW), Bartow #1 (121 MW), Bartow #2 (121 MW), and Bartow #3 (240 MW). In his capacity as Nuclear Project Manager, he was responsible for the engineering, procurement, construction, testing, and startup of the Crystal River Unit #3 project from 1975 through 1977 when the unit went into commercial operation. At the present, Mr. Alberdi supervises the total fossil operations for Florida Power Corporation.

## TECHNICAL QUALIFICATIONS

Mr. H. L. Allen - Gas Turbine Operations

1. Job Responsibilities

Operate and maintain gas turbine generation facilities in a safe, economical and efficient manner to meet Florida Power Corporation and regulatory requirements. Provide preoperational planning and representation for new gas turbine generating units. Support and implement company public and employee relations programs.

2. Education

Bachelor of Science in Mechanical Engineering

3. Nuclear Training

None

4. Summary

Gas Turbine Engineering, Maintenance and Management for 23 years.

## TECHNICAL QUALIFICATIONS

Mr. L. Eugene Allen - Production Engineering, Engineer II,  
Fossil Engineering

1. Job Responsibilities

The Engineer II position is responsible for preparation of detailed engineering studies to address operating and maintenance problems of fossil power plant generating facilities. Responsibilities include preparation of equipment specifications, drawings, and assembly of construction work packages.

2. Education

BSME - University of Houston, 1966

3. Nuclear Training

None

4. Nuclear Experience

Florida Power Corporation: January, 1977 - November, 1977. Engineer, reporting to Chief Mechanical Engineer for assignments for Crystal River Unit #3 Nuclear Plant.

5. Other Experience

Florida Power Corporation: Nine and one-half (9-1/2) years experience in design, construction, testing, and startup of fossil steam plants and gas turbine peaking units.

## TECHNICAL QUALIFICATIONS

Mr. M. W. Averett - Core Analysis Engineer

1. Job Responsibilities

The Core Analysis Engineer is responsible for reactor mathematical model development and use, core nuclear data generation, reactor performance analysis (static and dynamic) and fuel economics and management strategies. He is responsible for core data reduction and the coordination of reactor analysis results and reactor operation to insure the most efficient and safe nuclear fuel utilization. He is also responsible for reload fuel enrichment and shuffle pattern predictions and the technical evaluation of reload fuel proposals.

2. Education

B.S. Nuclear Science, Virginia Polytechnic Institute and State University - 1974.

M.E. Nuclear Engineering, University of Florida - 1975

3. Nuclear Experience

1975-1979 Middle South Services, Nuclear Engineer.

Conducted fuel management and core analysis activities for Arkansas Nuclear One - Units 1 and 2. Prepared computer models of the reactor core from basic fuel cell calculations to quarter core PDQ calculations. Also participated in core follow activities and shuffle pattern predictions for ANO-1.

4. Other Training

Underwent training for reactor operators' license at the VPI research reactor.

## TECHNICAL QUALIFICATIONS

Mr. Momtaz M. Bairagdar - Production Engineering, Mechanical Engineer

### 1. Job Responsibilities

Mechanical Engineer in the Nuclear Engineering Group. Responsibilities include system engineering design; system modification; material, equipment specification write-up and procurement for Crystal River Unit #3 Nuclear Plant, to meet Florida Power Corporation and regulatory requirements.

### 2. Education

BSME - University of Florida, 1968

### 3. Nuclear Training

The Principles of the ASME Code, Sections III and XI, given by the American Society of Mechanical Engineers, as it applies and implemented into the design of components used in the construction of nuclear power plants.

### 4. Nuclear Experience

Combustion Engineering, Inc.: Engineer, March, 1969 - December, 1971. Responsible for the design and analysis of NSSS components in accordance with the ASME Code, Section III.

Bechtel Corp.: Design Engineer, January, 1972 - November, 1974. Responsible for the design of power systems; the design and specification write-up of mechanical equipment used in the construction of Nuclear Power Plants.

Brown & Root, Inc.: Senior Engineer, December, 1974 - May, 1978. Responsible for the design of power systems, the design and specification write-up of mechanical equipment to be used for the construction of the South Texas Nuclear Project.

Florida Power Corporation: Mechanical Engineer, June, 1978 to Present. Responsible for engineering studies preparation; system engineering design and modification; equipment specification write-up and procurement; help in the effort of inservice inspection for Crystal River Unit #3 Nuclear Plant.

### 5. Other Experience

Ten (10) years experience in the design of nuclear power components and power systems used in the construction of nuclear power plants.

Registered Professional Engineer in the State of Texas.

ETibbs (T.Spec:MMB)D69

## TECHNICAL QUALIFICATIONS

Ms. Judy A. Baker - Nuclear Buyer  
Crystal River Unit 3

1. Job Responsibilities

Purchase all spare parts and general supplies, both quality and non-quality, for the nuclear plant. Purchase and evaluate bids and formal quotes for all items needed for nuclear engineering projects.

2. Education

Bachelor of Arts in Special Education, University of South Florida, Tampa, Florida - 1973.

3. Nuclear Training

None

4. Nuclear Experience

None

5. Summary

Judy A. Baker, Nuclear Buyer, began employment with Florida Power Corporation on April 17, 1978. Prior to this and since college graduation, she worked for K-B Axle in Los Angeles, California as a Purchasing Assistant and Honeywell in St. Petersburg, Florida as a Material Control Coordinator.



## TECHNICAL QUALIFICATIONS

Mr. Kenneth B. Baker - Production Engineer, Project Engineer

1. Job Responsibilities

Perform and be responsible for electrical design engineering and/or engineering coordination for projects associated with the Nuclear Plant, Crystal River Unit #3. Provide engineering services to support other Nuclear Plant activities such as licensing.

2. Education

BSEE - University of South Florida - 1973

3. Nuclear Training

"Nuclear Operations Quality Assurance" presented by FPC Quality Programs Department, February, 1978.

"Qualification of Safety-Related Equipment for Nuclear Power Generating Stations", presented by Drexel University and IEEE, October, 1978.

5. Other Experience

Engineer: February, 1974 to November, 1977. Responsible to the Chief Electrical Engineer for electrical design and procurement for Crystal River Unit #3.

Project Engineer: November, 1977 to Present. Responsible to the Manager Nuclear Engineering for providing electrical engineering and design services for Crystal River Unit #3.

Mr. Arthur M. Ball - Manager, Production Projects

1. Job Responsibilities

Develop, coordinate, approve and maintain uniform policies and procedures for the construction phase of all Production Department Betterment Projects. Manage the construction activities in all fossil steam and gas turbine plants.

2. Education

Bachelor of Science in Engineering, University of South Florida, Tampa, Florida 1970

3. Nuclear Training

Attended Florida Power Corp. sponsored in-house NUS Introduction to Nuclear Power Course including reactor physics, reactor operation, and rad. chem & protection.

4. Nuclear Experience

None

5. Summary

Mr. Arthur M. Ball began employment with Florida Power Corporation after graduation from U.S.F. during April 1970. He has consecutively held the positions of Associate Engineer (Production), Production Training Specialist (Personnel), Plant Electrical & Controls Engineer (Higgins Plant), Results Engineer (Plant Performance), Senior Production Engineer (Production), Combustion Turbine Plant Supervisor (DeBary Plant) and presently holds the position of Manager, Production Projects.

## TECHNICAL QUALIFICATIONS

Mr. Charles G. Barbour - Senior Quality Auditor

### 1. Job Responsibilities

The primary functions of this position are to assist the Manager of Quality Program Audits in the evaluation and selection of potential vendors for placement on the Approved Bidders List and reevaluation of existing vendors to maintain their approval status and for auditing internal FPC departments for compliance to Quality Program Manual requirements. Also to perform source surveillance/inspection on nuclear fuel fabrication facilities and other nuclear equipment suppliers.

### 2. Education

1973 to 1974 - Central Piedmont Community College  
Business Administration

1969 to 1973 - Central Virginia Community College  
Business Management

Total Credits - 57

### 3. Nuclear Training

1979 - Completed course "Quality Assurance for Nuclear Fuels"  
conducted by General Atomic Company. 20 hours (Certificate)

1979 - Attended training for "Welding Inspection" conducted by FPC NDE  
Level III. 8 hours.

1977 - Completed Management for Supervisors course held in  
August, 1977 (conducted by FPC). 32 hours (Certificate)

1977 - Participated in seminar program "Quality Assurance Applied to  
Light Water Reactor Fuel Fabrication" conducted by the Nuclear  
Audit and Testing Company, Inc. 32 hours

1977 - Qualified as Lead Auditor per ANSI N45.2.23.

1976 - Attended to FPC conducted NDE training class. Qualified NDE  
Level II for Visual Inspection and Penetrant Testing.

1976 - Attended Quality Assurance Training Class conducted by General  
Electric Company, Nuclear Engineering Services. 8 hours.

Mr. Charles G. Barbour (Cont'd)

3. Nuclear Training (Cont'd)

- 1975 - Participated in seminar program "Quality Assurance Applied to Light Water Reactor Fuel Fabrication" which was conducted by the Nuclear Audit and Testing Company, Inc. 32 hours (Certificate)
- 1974 - Attended company-conducted Magnetic Particle and Penetrant Testing Class (Duke Power). 40 hours
- 1973 - Attended Krautkramer-Lranson, Inc., School for Ultrasonic Testing. 40 hours (Certificate)
- 1973 - Attended company-conducted Technical Writing Training Course (Duke Power). 6 hours
- 1972 - Effective Speaking International - 16 weeks
- 1972 - Report Writing Course. 8 hours
- 1971 - Harvard Reading Course. 30 hours
- 1970 - Leadership Through Communication Course. 8 hours
- 1970 - Effective Speaking Course. 8 hours
- 1970 - Effective Listening Course. 4 hours
- 1969 - Quality Assurance Program (Advanced Metrology). 60 hours
- 1959 - University of Virginia, Extension Course, Basic Principle of Nuclear Energy. 10 weeks (Certificate)

4. Experience

Florida Power Corporation  
Quality Programs Department

1976 to Present - Senior Quality Auditor

Duties: Perform quality program audits of FPC internal quality program.

Perform audits, elevations, and inspections of nuclear equipment vendors.

Developing, conducting, and documenting training courses related to quality assurance.

4. Experience (Cont'd)

Preparation and implementation of the FPC Quality Manual.

Review of design documents, procurement documents, and other quality program documents.

1974 to 1976 - Quality Auditor

Duties: Perform quality program audits of CR-3 construction, test and operations.

Review and comment on design, construction, purchasing and plant operations procedures.

Perform quality surveillance activities at CR-3 construction site.

Perform as Quality Engineer.

Duke Power Company  
Design Engineering Department  
Electrical Utility for Western Part of North Carolina

1973 to 1974 - Quality Assurance Technical Specialist

Duties: Perform quality assurance audits of present and potential mechanical equipment, component and nuclear fuel vendors.

Perform quality assurance surveillance inspection of vendors that supply mechanical equipment, components, nuclear fuel and piping.

Prepare effective reports and descriptions of technical work.

Give technical advice and training (in special skill area) to others.

Carry out assigned tasks requiring special technical skill.

Represent the company on assigned matters often involving great importance and value.

Implement the following specifications:

ASME, Section IV  
ASME, Section IX  
10CFR50, Appendix B  
ANSI N45.2  
SNT-TC-1A

4. Experience (Cont'd)

Babcock & Wilcox Company  
Naval Nuclear Fuel Division  
Manufacturer of Nuclear Products

1969 to 1973 - Associate Engineer in Quality Assurance

Duties: Perform all phases of quality assurance as interpreting design drawings, military specifications, and to apply these items to subcontractors. Military specifications are MIL-Q-9858A, MIL-I-45208A, MIL-C-45662, MIL-STD-105, and NVA-SHIPS 250-1500.

Perform periodic quality assurance audits and field inspection of subcontractors' facilities.

Perform as cognizant engineer to assure that all design criteria had been fulfilled.

Maintain constant contact with the vendors and customers coordinating and administering necessary documents to assure that assigned contracts are completed as scheduled.

Review and disposition all vendor inspection procedures, gages, etc.

Work closely with all buyers as technical adviser.

1966 to 1969 - Buyer

Duties: Purchase special materials to military specifications: i.e., Zircaloy, Hafnium, Inconel, Copper, Boron S.S., etc.

Subcontract machining, chrome plating, deep hole drilling, etc.

Responsibilities:

Administer purchase orders.

Perform expediting audits on present subcontractors and evaluation audits on new subcontractors or vendors.

Prepare request for bid packages and forward to selected subcontractors and/or vendors to obtain competitive price and delivery quotations.

Maintain constant supply of materials and machined components to support production schedules.

Mr. Charles G. Barbour (Cont'd)

Responsibilities: (Cont'd)

Maintain cost breakdown on each purchase order - some purchase orders being in effect for one to three years and the value of approximately \$10,000,000.

1957 to 1966 - Quality Control Inspection

I began work in the Inspection Department as a "C" technician in September 1957 and advanced to the rating of Senior "A" inspector in 1963. I had this rating when I transferred to Purchasing.

Duties and Responsibilities:

Preliminary, intermediate, and final inspection of all components fabricated by the company. This involved dimensional inspection by mechanical methods and electronic methods.

Interpret drawings, specifications, procedures, and machine shop layout. I performed in all capacities during my career in inspection: i.e., gage control, records auditor, shift foreman, and my last year was as Chief Inspector in the aluminum fuel element fabrication shop.

## TECHNICAL QUALIFICATIONS

Mr. J. E. Barrett - Nuclear Maintenance Engineer

### 1. Job Responsibilities

The Nuclear Maintenance Engineer is responsible to the Planning Engineer for implementation and continued development of the preventive maintenance program. He provides engineering support for every shop discipline for plant system modifications. He assists in the resolution of problems related to the maintenance methods or equipment design which result in repeated repairs. He provides cost/benefit analysis for plant modifications and tooling needs to provide management with justification for the cost expenditures for these needs. He provides supervision for special maintenance projects on equipment which is critical to plant performance or adversely affects plant refueling.

### 2. Education

Bachelor of Science in Mechanical Engineering, University of Arkansas - 1962.

### 3. Nuclear Experience

He has had a total of six (6) years nuclear experience, three (3) in construction and startup testing Quality Assurance, and three (3) in plant startup and operating plant maintenance at this site.

### 4. Non-Nuclear Experience

He has had a total of ten (10) years non-nuclear engineering experience in the Aerospace Industry. Seven (7) years with the Boeing Company, experience directly related to the installation, test, operation and maintenance of Saturn V launch vehicle mechanical ground support launcher equipment and three (3) years with Brown Engineering Company, mechanical system design and malfunction analysis for space vehicle related equipment.

### 5. Summary

Mr. J. E. Barrett, Nuclear Maintenance Engineer, graduated from the University of Arkansas in 1962 with a BS Degree in Mechanical Engineering. To date he has had approximately sixteen (16) years experience in the design operation and maintenance of remotely controlled electro/mechanical systems. Experience in the nuclear industry includes six (6) years at this site during the plant's construction, startup testing and operational phases in Quality Assurance, Technical Support and Maintenance sections. Experience in aerospace industry includes three (3) years electro/mechanical system design analysis and system malfunction analysis, and seven (7) years in space vehicle launch hardware initial design verification testing, equipment installation, operation and maintenance.



## TECHNICAL QUALIFICATIONS

Mr. Jay S. Baumgardner - Planning Engineer, Generation Planning

### 1. Job Responsibilities

The primary purpose of this position is to determine the necessary future generation facilities required for reliable and economic operation, construction, and maintenance of the overall Florida Power bulk power system. This includes the addition of new generation and its siting; modifications of existing facilities; the timing of the retirement of existing facilities; and projected fuel requirements for Florida Power's generation system.

### 2. Education

Bachelor of Science in Electrical Engineering, University of South Florida, Tampa, Florida - 1974

### 3. Nuclear Training

He has attended general nuclear plant orientation classes at Crystal River Unit 3.

### 4. Nuclear Experience

1976 - 1977--He was responsible for the writing and completion of the thermal performance test procedures for both the Nuclear Steam Supply System and the Turbine/Generator at Crystal River Unit 3.

Also investigated and determined causes for deficient secondary plant performance.

### 5. Summary

Began employment on April 8, 1974, after completing education at the University of South Florida.

First assignment was in Distribution Engineering, where he assisted in the design and construction coordination of distribution systems.

Second assignment was at Anclote Power Plant, where he assisted the plant staff with varied projects wherever needed.

The first permanent position was in Plant Performance. He ran performance tests on the combustion turbines and steam power plants throughout the system.

He is a registered professional engineer in the State of Florida.

## TECHNICAL QUALIFICATIONS

Dr. Patsy Y. Baynard - Acting Manager, Nuclear Support Services

### Job Responsibilities

Management of the Nuclear Support Services Department in order to provide home office nuclear expertise to support operating nuclear facilities.

### 2. Education

Bachelor of Science Degree in Chemistry and Mathematics, State College of Arkansas, Conway, Arkansas - 1970.

Doctorate of Philosophy Degree in Nuclear Chemistry, University of Arkansas, Fayetteville, Arkansas - 1973.

Courses only: Bettis Reactor Engineering School, Bettis Atomic Power Laboratory - 1974.

Masters of Business Administration, Florida Institute of Technology - 1979.

### 3. Nuclear Training

- A. Nuclear Core Design - 5 weeks, 4 hours/week - 1974.  
Included study of all aspects of nuclear core design.
- B. Power Plant Technology - 12 weeks, 2 hours/week - 1974.  
Included study of all aspects of nuclear plant design and operation.
- C. Radwaste Management for Nuclear Power Reactors - 1 week, 10 hours/day - 1976. Included study of Radioactive Waste Management for Nuclear Power Plant Operation.

### 4. Nuclear Experience

Employed by Bettis Atomic Power Laboratory (BAPL), Westinghouse Electric Corporation from 1973 to 1975. Her duties included research and development in reactor coolant chemistry for the Shippingport Atomic Power Station (SAPS) and the Navy Nuclear Program, establishment of a quality control program for the chemistry and radiochemistry programs for the SAPS, and participation in all phases of the radiological environmental program for the SAPS and BAPL.

Employed by Florida Power Corporation as Nuclear Support Specialist, Chemistry and Radiation Protection Services from 1975 to 1978. Her duties included the overall radiation protection, radiochemistry, water chemistry and waste disposal programs for CR-3.

ETibbs(T.SpecPYB)D1

456 020

## TECHNICAL QUALIFICATIONS

Mr. G. P. Beatty - Nuclear Plant Manager

1. Job Responsibilities

Mr. G. P. Beatty, Nuclear Plant Manager, is responsible for the overall operation of Crystal River Nuclear Plant.

2. Education

Bachelor of Mechanical Engineering, Clemson University, 1958

3. Nuclear Training

Reactor Safety & Hazards Evaluation Course - Two weeks, 8 hrs/day - 1966. Conducted by HEW, Rockville, Maryland.

Nuclear Power Reactor Safety Course - Three weeks, 8 hrs/day - 1966. Conducted by MIT.

Basic Radiological Health Course - Two weeks, 8 hrs/day - 1967. Conducted by HEW, Cincinnati, Ohio.

Nuclear Fuel Management Course - Two weeks, 8 hrs/day - 1967. Conducted by NUS Corporation, Washington, D.C.

Westinghouse Reactor Operator Training Program - one year full-time. Conducted by Westinghouse, Hartsville, S.C., Waltz Mill, PA, Saxton, PA, Pittsburgh, PA.

- (1) Completed license requirements for a reactor operator on the Saxton Nuclear Experimental Reactor, August, 1969.
- (2) Completed "Cold" License Requirements for a Senior Reactor Operators License, June, 1970 (SOP-1932) for H. B. Robinson Unit No. 2.

Reactor Operator Retraining Program conducted by Westinghouse & Carolina Power & Light Co., Three Weeks 8 hrs/day, April, 1972.

- (1) Re-licensed as Senior Reactor Operator, H. B. Robinson Unit 2, June, 1972.

Reactor Operators Training Program conducted by FPC operations personnel at Crystal River site.

Mr. G. F. Beatty - (Cont'd)

4. Nuclear Experience

Engineering

1966 - 1972. As superintendent of Carolina Power & Light Company, H. B. Robinson Plant participated in the Design Reviews with CP&L Engineers, Management & Vendors from the PSAR stage through Construction and Operating License Stage.

Quality

1969-1972. Became familiar with Construction Quality System for the construction of H. B. Robinson Unit No. 2, participated in the compliance exit interviews when possible. Was responsible for the development of the Operating Quality Program at H. B. Robinson Unit No. 2.

1973 - 1977. Responsible for the development of the Operating Q A/QC Program for CR #3.

Construction

1967 - 1971. Observation of construction, made recommendations for design changes, etc. No basic responsibilities in this field.

1974 - 1975 Deputy Project Manager, CR #3.

Startup & Testing

1969 - 1971. As Superintendent of H. B. Robinson Unit No. 2, approved and accepted all pre-operational & startup test performed. Worked closely with vendor and constructors personnel and plant staff.

1975 - 1977. As Plant Manager, CR #3, worked with startup test group to complete preoperational functional, initial criticality test and power escalation test for CR #3.

Operations

1968 - 1972. Performed startups on Westinghouse CES Training Reactor, seven months training in operation of Saxton Nuclear Experimental Reactor during operation & Refueling. Had overall responsibility for the operation of H. B. Robinson Unit No. 2 from the preoperational phase through sixteen months of commercial operation.

1975 - 1979. Plant Manager CR #3.

Mr. G. P. Beatty - (Cont'd)

Safety

1969 - 1972

As superintendent of H. B. Robinson Plant worked with Technical Services Personnel in the formation of the emergency plan, made contacts with various Local and State Agencies in regard to their participation in the plan.

1975 - 1977. As Plant Manager of CR #3. (Same as above)

5. Summary

Mr. Beatty's direct nuclear experience is preceeded by 8 years (prior to 1966) involvement in the startup, operation and maintenance of fossil plants, having served as plant engineer, maintenance supervisor, operations supervisor and Plant Manager.

## TECHNICAL QUALIFICATIONS

Mr. Gary A. Becker - Production Engineering, Project Engineer

1. Job Responsibilities

Provide technical engineering activities to develop, perform, and coordinate the design, estimating and procurement of projects for Crystal River Unit #3 Nuclear Plant.

2. Education

BSME - Florida Atlantic University, 1973

3. Nuclear Training

ASME Boiler and Pressure Vessel Code, Section III, Piping Design and Fabrication Seminar, 1978.

Radiation Control Course given by Electric Boat Div., Groton, Conn., 1976.

4. Nuclear Experience

Electric Boat Division of General Dynamics, Groton, Conn.: Nuclear Project Engineer, June, 1973 - March, 1975. Performed pipe stress analysis and piping system design functions for MARF project.

Electric Boat Div. of West Milton Site, New York: Senior Engineer, April, 1975 - March, 1976. Performed engineering liaison during construction of MARF project.

Electric Boat Division at Shippingport, Pa.: Senior Engineer, March, 1976 - November, 1976. Performed construction engineer functions during modifications to Shippingport Atomic Power Station.

Electric Boat Division at West Milton, New York: Senior Engineer, December, 1976 - May, 1978. Performed stress analysis and design of safety related piping system supports for the S&G prototype.

Florida Power Corporation: Project Engineer, May, 1978 - Present. Perform design activities for modification to Crystal River Unit #3 Nuclear Plant.

5. Other Experience

None

Registered Intern Engineer in the State of Massachusetts.

## TECHNICAL QUALIFICATIONS

Mr. Thomas R. Bingham - Manager Production Engineering Services

1. Job Responsibilities

Major function of this position is to manage a diverse staff, responsible for providing engineering support services to the Production Engineering Operations and Generation Projects Departments with drafting services, engineering document processing and control, computer data processing, microfilming, and technical support as requested.

2. Education

Attending a Program at St. Petersburg Junior College which will lead to a Bachelor of Science Degree in Business Administration.

3. Nuclear Training

Nuclear Engineering Indoctrination course - Florida Power Corporation.  
2 weeks - 8 hours/day - December 1967.

## TECHNICAL QUALIFICATIONS

Mr. David B. Black - Structural Construction Supervisor,  
Combustion Turbine Projects

### 1. Job Responsibilities

Plan, organize and manage the accomplishment of all civil, structural, and architectural aspects of generating plant construction and other assigned projects. Provide necessary field engineering, procurement, estimating, scheduling and coordination to accomplish same.

### 2. Education

Associate of Arts - Central Florida Community College,  
Ocala, Florida, 1969, Civil Engineering Tech.  
Bachelor of Science - University of West Florida,  
Pensacola, Florida, 1971, Industrial Technology.

### 3. Nuclear Training

No formal nuclear training.

### 4. Nuclear Experience

1972 - 1975. Supervised various structural and architectural installations in the construction of Crystal River Unit #3. Responsible for subcontract management of structural and specialty contractors.

1975 - 1976. Managed project scheduling activities and maintained project status reports during testing phase of Crystal River Unit #3 startup. Maintained NRC construction status reports.

1976 - Structural Test Engineer during performance of Local Leak Rate Testing, Integrated Leak Rate Test, and Containment Structural Integrity Test.

### 5. Summary

David B. Black, Structural Construction Supervisor, began employment with Florida Power Corporation on August 2, 1972. Prior to this, and since college graduation, he worked for various sub-contractors to Florida Power Corporation on generating plant construction, as a Field Engineer.

He was registered as an Engineer-in-Training in June, 1973.



## TECHNICAL QUALIFICATIONS

Mr. Gary L. Boldt - Performance Engineering Supervisor

### 1. Job Responsibilities

Responsible for plant thermal and nuclear performance programs and for maintenance of computer software. Responsible for technical direction of refueling operations, development of reactor characteristics, and other technical services in support of operations. Directs and supervises the performance engineering staff including the Results Engineer, Computer and Controls Engineer and the Reactor Engineer. Evaluates operating data and conducts tests to assure efficient plant operation. Reviews refueling and other plant procedures to reduce downtime and thereby increase plant availability. May assume responsibilities of Technical Support Engineer and/or Technical Services Superintendent during major outages.

### 2. Education

Bachelor of Science, Science Engineering, Northwestern University - 1968.

U.S. Navy Nuclear Power School, Mare Island, California - 1969.

U.S. Navy Nuclear Power Prototype Unit SIW, Idaho Falls, Idaho - 1970.

Partial completion of MBA program, University of California - 1976.

Miscellaneous industry training courses in:

- Computer Programming
- Turbine Cycle Heat Balance
- BWR Reactor Engineering
- BWR Operations Simulator

### 3. Nuclear Training

Approximately 2 years of formal classroom training including undergraduate college, military and nuclear industry courses.

### 4. Licenses

Professional Engineer's License, Mechanical Engineering - California #M17377.

Professional Engineer's License, Mechanical Engineering - Massachusetts #28707.

Qualified Engineering Officer of the Watch, Naval Reactors Division of AEC, 1969 (expired 1973).

ET1bbs(T.SpecGLB)D4

456 027

5. Nuclear Experience

A total of eleven (11) years of nuclear experience as a graduate engineer. Experience includes: system design, safety analyses, operations, maintenance, licensing and engineering management covering periods of at least two years in each of the three major nuclear reactor designs (PWR, BWR, HTGR); and two major applications (nuclear propulsion and nuclear electrical generation).

6. Summary

Mr. Boldt graduated from Northwestern University in 1968 upon completion of a five year cooperative engineering program with Lockheed Missiles and Space Company, Sunnyvale, California. After graduation, he enlisted in the U.S. Navy as an officer candidate. Following his basic officer training and commissioning, he completed a one year course of instruction in nuclear propulsion plant design, operation and maintenance including 6 months of "hands on" prototype equipment operation. This training resulted in qualification as Engineering Officer of the Watch (EOOW) for naval nuclear plants. This qualification program is equivalent to a civilian Senior Reactor Operator license.

Mr. Boldt then served for an additional 3-1/2 years as a division officer aboard a nuclear submarine and was released from active duty in March 1973. At this time, he was employed by Bechtel Power Corporation as a Senior Nuclear Engineer. In this position, he worked in areas of design, safety analyses, and licensing of several new nuclear generating units including Palo Verde, San Onofre and Kuosheng. He was later promoted to Assistant Nuclear Engineering Group Leader on the Vidal Project, a twin unit desert-sited HTGR nuclear generating station.

In September 1976, Mr. Boldt was employed by Boston Edison Company as a Senior Performance Engineer at their Pilgrim Station Unit 1, a boiling water reactor generating unit. In this position, he supervised other engineers and technicians in testing nuclear plant equipment and designing system modifications. He also served as Acting Maintenance Staff Engineer for a period of six months.

In July 1978, Mr. Boldt was hired by Florida Power Corporation to fill a newly created position as Performance Engineering Supervisor at Crystal River Unit 3. The responsibilities of this position are described above in Item 1.

## TECHNICAL QUALIFICATIONS

Mr. Roland C. Bonner - Manager Production Engineering

1. Job Responsibilities

This position is responsible for the overall management of resources to provide engineering and design services in support of Florida Power Corporation power generating facilities, including the Crystal River #3 Nuclear Plant.

2. Education

Bachelor of Science in Electrical Engineering, University of Arkansas, Fayetteville, Arkansas, 1968.

3. Nuclear Experience

1970 - 1977. Supervisory experience in all phases of the construction, testing and startup activities related to the Crystal River Nuclear Plant.

1977 through 1979. Engineering management responsible for overall management of engineering and design services in support of Crystal River Unit #3.

4. Summary

Mr. Roland C. Bonner, Manager Production Engineering, began employment with Florida Power Corporation on July 20, 1970. Prior to this he worked for Commonwealth Associates, Inc., Jackson, Michigan. At Commonwealth Mr. Bonner held various construction management positions responsible for installation, testing and startup of fossil and industrial plant projects.

Since joining Florida Power Corporation, he has held responsible engineering, supervision, and management positions related to the design, construction, testing, startup and operations of Crystal River Unit #3.

## TECHNICAL QUALIFICATIONS

Mr. Thomas A. Bourne - Manager, Property Tax Department

### 1. Job Responsibilities

Responsibilities of this position as they relate to this particular NRC review and the nuclear facility involve my acting as a backup for the Manager of the Risk Management Department on the Radiological Support Team. In the event of a nuclear accident and the Manager of the Risk Management Department cannot be contacted, then I would have to notify the appropriate insurance representatives.

My regular responsibilities consist of compiling and filing ad valorem tax returns in each of the counties in which the Company has real and/or personal property, and negotiating all assessment disagreements. Also, responsible for all ad valorem tax payments and for securing all necessary occupational licenses.

### 2. Education

Associate of Arts Degree - St. Petersburg Jr. College.

Bachelor of Arts Degree in Accounting - University of South Florida.

Need six more courses for M.B.A. - University of South Florida.

### 3. Experience

En masse appraiser, personal property specialist - James H. Howze and Associates for one year, Utility Property Tax Representative for twelve years. Member of International Association of Assessing Officers, Property Appraisers Association of Florida and the Florida Utility Tax Managers Association (Past President).

## TECHNICAL QUALIFICATIONS

Mr. Preston L. Breaux - Shift Supervisor/Crystal River Nuclear Plant  
Unit #3

### 1. Job Responsibilities

Responsible to the Operations Superintendent to plan, supervise and coordinate the duties and training of operating personnel assigned to his shift and serve in an advisory consulting capacity as regards to plant operations. Responsible for all operating activities including a Master Surveillance Plan performed daily on Plant Systems, and the sole authority at the plant when immediate supervisors are not present.

### 2. Education

High School Graduate, DeLand High School - 1946.

2,000 hours of Aircraft and Engine Mechanic, Cal. Aero Tech., Glendale, California

Technical Education Center of Pinellas County - 1969. Math - 115 hours, Chemistry - 45 hours, and Phys. 90 hours.

"Essentials of Supervision", Central Florida Junior College, Ocala.

"Principles of Management", Central Florida Junior College, Ocala.

### 3. Nuclear Training

He has had a total of 61 weeks (1.2 years) of classroom training, including Phase 1, 2, 3, 4, 5 and 6 as stated in FSAR Section 12.2.

### 4. Nuclear Experience

He has had a total of 9 years of nuclear experience including engineering and design supervision, startup and testing, and practical operating experience.

### 5. Summary

Mr. Breaux started in plant operation with Florida Power Corporation as a Plant Apprentice, and progressed through all operating classifications to Plant Operator at the Higgins Plant, where he was involved with the initial startup of Higgins Plant (Units 1, 2 and 3 plus 4 and 5 Gas Turbine Units).

Mr. Preston L. Breaux (Cont'd)

Mr. Breaux transferred to Crystal River Unit #3 as a Chief Operator in 1969, and was promoted to Shift Supervisor at Crystal River in January 1973. He was involved with the initial fuel loading and startup of Crystal River Unit #3 and has 29 years of power plant experience and satisfactorily completed a NRC-approved training program. This program utilizes a complete and accurate nuclear power plant simulator. He has taken and passed an approved NRC examination for Senior Reactor Operator's License.

ETibbs(T.SpecPLB)D77

456 032

## TECHNICAL QUALIFICATIONS

Mr. Ronald M. Bright - Nuclear Support Specialist  
Environmental & Nuclear Services

### 1. Job Responsibilities

The primary functions of this position are to define, coordinate and implement necessary environmental programs, both radiological and non-radiological for the nuclear power program, and to coordinate all design modification activities among the plant staff, FPC engineering, the Reporting Specialist, FPC construction and any other involved parties.

### 2. Education

Bachelor of Science in Nuclear Engineering, University of Virginia, Charlottesville, Virginia, 1971.

### 3. Nuclear Training

He has taught various aspects of NRC Reactor Operator Hot License Training including mathematics, physics, radiation protection, and various plant systems while at the Oyster Creek Nuclear Station.

He successfully attended TRW Company's Sigma III Computer Hardware Maintenance School for the Oyster Creek Nuclear Station from June to August, 1972.

He has attended a NRC Reactor Operator Hot License Class at Crystal River Unit 3 and received a Senior Reactor Operator's License in June, 1977 (expired June 1979).

### 4. Nuclear Experience

1971 - 1975. Supervisory experience in all phases of Technical Engineering Support and in Technical Specification Surveillance Tests for an operating reactor.

1975 - 1976. Reactor Engineer at Crystal River Unit 3. As Special Nuclear Material (SNM) custodian, wrote fuel receipt procedures and was in charge of the receipt and inspection of new fuel.

1976 to present. Nuclear Support Specialist, Environmental & Nuclear Services.

### 5. Summary

Mr. Ronald M. Bright, Reactor Engineer, began employment with Florida Power Corporation on May 5, 1975. Prior to this and since college graduation, he worked for Jersey Central Power and Light Company at the Oyster Creek Nuclear Electric Generating Station, Forked River, New Jersey, as an Associate Engineer.

Mr. Ronald M. Bright (Cont'd)

As such, he supervised reactor startup and shutdowns, determined full power control rod patterns and developed control rod withdrawal sequences, and planned and performed low power physics tests. His responsibilities included the Primary Containment Leak Rate Procedure and Test, local leak rate procedures and tests, and completing reports on fuel warranty, Edison Electric Institute Plant Availability Reporting System, Nuclear Plant Reliability Data System, and technical projects.

He trained new engineers on an informal basis to where they could take over the responsibilities of the reactor work and he formally taught sections of the NRC Reactor Operators License Courses that were applicable to his work.

He is a member of the American Nuclear Society and the Florida Section of the American Nuclear Society.

He was registered as a Professional Engineer in Nuclear Engineering in February, 1979.



## TECHNICAL QUALIFICATIONS

Mr. George Brilli - Senior Nuclear Buyer

1. Job Responsibilities

Purchase equipment and materials for Crystal River Unit #3 Nuclear Power Plant from qualified suppliers offering competitive prices and acceptable delivery. Coordination of the procurement function with the Engineering, Quality Assurance and Plant Operations Departments. Assist in the selection of qualified sources of supply for nuclear parts and materials.

2. Education

New York University, Engineering College - 1949-1954.

3. Nuclear Training

No specific training with respect to nuclear plant equipment or system function or operation.

Attended seminars on the purpose and implementation of nuclear quality assurance programs as they apply to procurement, given by Ebasco Services, Inc. and by Pocomac Electric Company.

4. Nuclear Experience

1968 - 1979 - Purchase of operating and maintenance materials for an existing nuclear power plant (Indian Point #1) and the purchase of major plant equipment for several new nuclear construction projects, including Waterford 2 (L.P. & L.), St. Lucie 1 & 2 (F.P. & L.), Allens Creek 1 (H.L. & P.), Shearon Harris 1-4 (C.P. & L.) and Washington Public Power Service Units 3 & 5.

5. Summary

Joined Florida Power Corporation May 22, 1979 as Senior Nuclear Buyer. From 1971 through 1979, was employed by Ebasco Services, Inc., New York, in several purchasing capacities all having an association with procurement for nuclear power projects. From 1968 through 1971, was a Purchasing Supervisor with Consolidated Edison Company of New York where responsibilities included support of an operating nuclear station and procurement of equipment for two others under construction.

Background also includes experience in procurement for fossil and hydroelectric generating stations.

## TECHNICAL QUALIFICATIONS

Mr. Leo A. Brosche, III - Quality Supervisor  
Combustion Turbine Projects

### 1. Job Responsibilities

The primary function of this position is to develop, coordinate and implement the Quality Programs on combustion turbine construction projects.

### 2. Education

Bachelor of Science, Engineering (Mechanical), Florida Technological University, Orlando, Florida - 1973

### 3. Nuclear Training

Successfully completed training required for certification as a "Lead Auditor" in accordance with ANSI N45.2.

Conducted training sessions for Plant Engineers in Non-Destructive Examination and leak testing.

### 4. Nuclear Experience

1974 - 1976 - Quality Programs Department, Crystal River #3 Construction. Performed audits to verify compliance with Corporate Quality Assurance and NRC requirements.

Performed non-destructive examination on piping systems and components.

### 5. Applicable Non-Nuclear Experience

1976 - 1979 - Provided Quality supervision during construction of Anclote Unit #2. Certified Level II in accordance with ANST-TC-1A and FPC QAP-17 for the following processes: ultrasonic testing, dye penetrant, magnetic particle, and radiographic inspection. Certified welders, developed welding procedures, and recommended welding processes and techniques for boiler and piping welding on Anclote Unit #2.

ANCLOTE PLANT

NAME David T. Buell

TITLE Technical Serv. Superintendent

EDUCATION Bachelor of Science - Mechanical  
Engineering  
Professional Engineer License  
#16247

TECHNICAL EXPERIENCE (MAN-YEARS)

a. ENGINEERING

(1) ENGINEERING MANAGEMENT

(2) TOTAL UTILITY EXPERIENCE

9 Years

b. FIELD

(1) ELECTRICAL ENGINEERING

(2) MECHANICAL ENGINEERING

(3) MECHANICAL MAINTENANCE

(4) ELECTRICAL MAINTENANCE

(5) INSTRUMENT & CONTROL MTC.

(6) CHEMISTRY

(7) POWER PLANT OPERATIONS

F

N

9

4

5

5

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ET1bbs(DTB)D69

456 037

## TECHNICAL QUALIFICATIONS

Mr. ~~Ray~~ S. Burns, Jr. - Production Engineering, Mechanical Engineer, Fossil Engineering Group

### 1. Job Responsibilities

Design of modifications to fossil power plants.

### 2. Education

Bachelor of Science in Mechanical Engineering Degree, University of Buffalo, New York, 1958

Master of Engineering in Engineering Administration Degree, University of South Florida, June, 1972

### 3. Nuclear Training

a) B&W Nuclear Power Plant Indoctrination Course - 1 week, 8 hours per day, 1968.

b) Principles of Nuclear Engineering Course given by FPC Nuclear Engineering, 1969, about 20 weeks, 2 hours per week, including one day, 8 hours, instruction and operation of training reactor at University of Florida.

### 4. Nuclear Experience

Engineering Management: 1971 - 1974, one (1) year as Manager, Mechanical and Structural Engineering.

1974 - 1977, Crystal River Unit #3 Nuclear Plant: Engineering Manager; management of engineering work, including consultant A/E's (Gilbert Associates, Inc.) for Crystal River #3 Nuclear Plant.

### 5. Other Experience

a) 1958 - 1961, Worthington Corp., Buffalo, N.Y. Mechanical design reciprocating machinery.

b) 1961 - 1964, Florida Power Corporation. Assistant Production Engineer in Production System Department, assisting power plant personnel in maintenance and operating problems.

c) 1964 - 1968, Florida Power Corporation. Plant Mechanical Engineer, Bartow Plant, responsible for maintenance and some result work in fossil power plant.

d) 1968 - 1971, Florida Power Corporation. Assistant Plant Superintendent and Plant Superintendent, Bayboro Plant. Manage operations and maintenance of fossil power plant.

Registered Professional Engineer in State of Florida

ETSibbs (RSB)D83

456 038

## TECHNICAL QUALIFICATIONS

Mr. Daniel L. Campbell Jr. - Production Engineering, Project Engineer

1. Job Responsibilities

Provide on a project basis technical engineering activities to develop, perform and coordinate the design, estimating and procurement for Crystal River Unit #3 Nuclear Plant.

2. Education

BCE - University of Florida - 1968

3. Nuclear Training

"Principles of Nuclear Power Generation" course given by Tennessee Valley Authority Design and Construction Division, Knoxville, Tenn., 1972.

4. Nuclear Experience

Tennessee Valley Authority: Civil Engineer, March, 1971 - July, 1973. Structural design of reinforced concrete for Browns Ferry Unit #3, and Watts Bar Units 1 & 2. Checking of computer analysis and reinforced concrete design of turbine generator foundation for Sequoyah Units 1 & 2. Responsible to Senior Civil Engineer, Concrete Section.

Florida Power Corporation: Project Engineer, April, 1979 - Present. Responsible to the Manager, Nuclear Engineering for all assigned projects and modifications to Crystal River Unit #3 Nuclear Plant.

5. Other Experience

Two (2) years experience with the U.S. Army as a Civil Engineer, coordinating construction, both military and civilian, of various projects for Ft. Ord, California, and the Republic of Vietnam.

Six (6) years experience with a private structural engineering firm as a structural engineer engaged in the design of various projects, including many federal, state, and city government buildings.

Registered Professional Engineer in the State of Florida.

ANCLOTE PLANT

NAME Richard P. Carter

TITLE Maintenance Planner and Supervisor  
Scheduler

EDUCATION B.S. Systems Management  
Engineering

TECHNICAL EXPERIENCE (MAN-YEARS)

20 Years

- a. ENGINEERING
- (1) ENGINEERING MANAGEMENT
- (2) TOTAL UTILITY EXPERIENCE

6 Years

3 Years

- b. FIELD
- (1) ELECTRICAL ENGINEERING
- (2) MECHANICAL ENGINEERING
- (3) MECHANICAL MAINTENANCE
- (4) ELECTRICAL MAINTENANCE
- (5) INSTRUMENT & CONTROL MTCE.
- (6) CHEMISTRY
- (7) POWER PLANT OPERATIONS
- (8) DOCUMENTATION SYSTEMS

F

N

6

6

6

6

1-1/2

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(RPC)D69

456 040

ANCLOTE PLANT

NAME James A. Cason  
TITLE Shift Supervisor  
EDUCATION High School

TECHNICAL EXPERIENCE (MAN-YEARS)

- a. ENGINEERING  
(1) ENGINEERING MANAGEMENT  
(2) TOTAL UTILITY EXPERIENCE
- b. FIELD  
(1) ELECTRICAL ENGINEERING  
(2) MECHANICAL ENGINEERING  
(3) MECHANICAL MAINTENANCE  
(4) ELECTRICAL MAINTENANCE  
(5) INSTRUMENT & CONTROL MTCE.  
(6) CHEMISTRY  
(7) POWER PLANT OPERATIONS

<u>F</u>	<u>N</u>
3-1/2(a)	27(b)

- (a) 3-1/2 Years training for startup of Nuclear Plant  
(b) 27 Years Fossil Fuel

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(JAC)D83

## TECHNICAL QUALIFICATIONS

Mr. Jack C. Clapp - Manager, Quality Program Audits

### 1. Job Responsibilities

The function of this position is the management of FPC Quality Program Audits as related to the following activities:

- A. The Quality Programs and contractor personnel reporting to him in such a manner as to provide FPC management with documented assurance of compliance to codes, regulations, standards, and specifications to which the company has committed.
- B. The total process of providing documented evaluations of company compliance to quality audit requirements committed to by FPC management through activities of a comprehensive audit program.
- C. The gathering of documented evidence of compliance to FPC vendor quality evaluation requirements. These activities are accomplished through a comprehensive vendor evaluation program.
- D. Activities required to provide surveillance of pre-determined vendor, in-process functions, plant operations, plant maintenance, and plant modification within the scope of commitments through implementation of governing quality programs policies and procedures.
- E. The maintenance of Quality Programs policies and procedures affecting audits, evaluations, and surveillances in a working status to comply with codes, standards, specifications, and regulations committed to by FPC management through review and update.
- F. Periodic participation by the incumbent in all of the above activities is important for continued working knowledge and proficiency in audit, surveillance, and evaluation processes.
- G. The Quality Programs Department personnel under his direction and the contractors reporting to him.

### 2. Education

- A. BS - Architecture, Clemson College, Clemson, South Carolina - 1953.



3. Nuclear Experience

- A. Engineer - Six years with a Nuclear Engineering firm with responsibilities for design, development and research on various phases of engineering dealing with both electric power producing and training reactors. Engineering functions included nuclear containment feasibility studies, nuclear excursion control, development of reactor safety equipment, emergency cooling and control systems, fuel handling equipment, etc.

Mechanical supervision for extensive modification to the Navy Nuclear Aircraft Prototype facility at Idaho Falls.

- B. Quality Assurance - Quality Assurance Site Manager for Engineering and Construction of Nuclear Rocket Facility at Jack Ass Flats.

Corporate Quality Assurance Manager for large Engineering and Construction Firm with responsibilities for Quality Assurance related to all nuclear projects.

Manager, Quality Program Audits with responsibilities as outlined in 1 above.

4. Professional Experience

- A. Manager of a 65-man Field Quality Group for NASA contracts for the management of the propellant servicing systems, Complex 39, Cape Kennedy, Florida, with responsibilities for the supervision of all quality assurance and control inspection to comply with NASA QA provisions, including surveillance personnel during the installation of the data and propellant systems.
- B. Assigned to the Engineering Department of a Contract with NASA for Facility Support on the Apollo Program at Kennedy Space Center. Manager of the Structural Design Group and handled structural and architectural support requirements for Configuration Control covering reliability engineering.

## TECHNICAL QUALIFICATIONS

Mr. John B. Clardy - Manager, Production Services

### 1. Job Responsibilities

Major function of this position is to provide plant performance testing and evaluation; provide Departmental fossil fuel management services; and to provide chemical and environmental testing and support functions to operating generation facilities.

### 2. Education

- A. Bachelor of Science, Chemistry, Southern State College, 1956.
- B. University of Arkansas, Graduate Institute of Technology, 1968 - 1971.
  - (1) Radiochemistry
  - (2) Air pollution
  - (3) Water pollution
  - (4) Water supply and wastewater treatment

### 3. Nuclear Training

- A. 1967 - Introduction to Nuclear Power (NUS)
- B. 1968 - Basic Nuclear Theory (B&W - VPI)
- C. 1971 - Environmental Aspects of Nuclear Reactors (EPA)
- D. 1972 - Ten-week course in Health Physics and Radiation Protection (ORAU)
- E. 1974 - Applied Audit Techniques for Quality Assurance Effectiveness (L. Marvin Johnson & Associates)

### 4. Nuclear Experience

January 1967 - September 1974, Chief Chemist, Production Department, Arkansas Power and Light Company.

Member of the Florida Power Corporation Nuclear General Review Committee since October 1974.

### 5. Summary

Mr. Clardy spent ten years as a Power Plant Chemist with responsibility for plant water testing and treating.

In 1967, he was promoted to Production Department Chief Chemist. The duties of Chief Chemist involved coordinating the water and fuel  
ETibbs(T.SpecJBC)D75

5. Summary (Continued)

treatment and analysis problems for five existing steam electric stations and assisting with the design of water treatment facilities for new plants.

During the period 1967 - 1974, Mr. Clardy participated in the design, construction, and operational testing phase of Arkansas Nuclear One.

From May 1973 to September 1974, he was responsible for the radiological analysis of environmental samples required by the Environmental Technical Specifications of Arkansas Nuclear One.

His responsibilities also included providing staff assistance in radiochemistry as well as balance of plant water chemistry.

Mr. Clardy joined Florida Power Corporation, Production Department, in October 1974 as Staff Chemical Engineer. In March of 1975, he was promoted to Supervisor, Chemical & Environmental Services, with responsibility for Departmental Coordination for water testing and treating, fuel analysis and air and water pollution prevention. He was promoted to his present position in July 1977.

Professional Society Memberships include the American Chemical Society, the Deep South Chapter of the Health Physics Society, and the National Association of Corrosion Engineers.

## TECHNICAL QUALIFICATIONS

Mr. Ronald E. Clauson - Production Engineering, Project Engineer I&C

### 1. Job Responsibilities

This position is responsible for assigned Instrumentation and Control (I&C) Engineering Projects from the conceptual stage through final implementation at the Crystal River Unit #3 Nuclear Plant.

### 2. Education

BSME (Nuclear Option) - South Dakota State University, 1973.

### 3. Nuclear Training

U.S. Navy Nuclear Power School: Operator training and Engineering Laboratory Technician training.

### 4. Nuclear Experience

U. S. Navy Nuclear Submarine Force, July 1961 - June, 1969: Leading petty officer of M-Division. Leading engineering laboratory technician. Engine room watch supervisor. Operation and maintenance of reactor, reactor support systems and steam propulsion systems. Maintenance of reactor coolant chemistry. Supervise radiation exposure of personnel. Supervise control of radioactive waste disposal. Supervise boiler water chemistry control.

Westinghouse Nuclear Energy Systems, May, 1973 - Dec. 1974: Engineer-Mechanical and Fluid Systems Evaluation section of Nuclear Safety Dept. Responsibility for specific technical areas of safety analysis reports dealing with fluid systems. Follow implementation of the AEC's high energy line break criteria.

General Atomic Company, January, 1975 - December, 1975: Engineer - Design integration section of systems integration branch on high temperature gas cooled reactor project. Responsible for control of physical and functional interfaces through review of top level documents and drawings, initiation of changes to modify physical/functional interfaces, and control of costs by review of all change requests and change notices.

Florida Power Corporation, February, 1976 - Present: Engineer II, Feb., 1976 - Nov., 1977. Reporting to I&C Engineer for assigned projects on Crystal River Unit #3. Project Engineer, November, 1977 - Present. Reporting to Manager Nuclear Engineering for assigned projects on Crystal River Unit #3 Nuclear Plant.

### 5. Other Experience

Auto Mechanic: 1958 - 1961. Design and Research Technician, Plant Science Department, South Dakota State University, 1971 - 1972.

456 046

## TECHNICAL QUALIFICATIONS

Mr. Raymond J. Clauss - Supervisor, Production Project Control

1. Job Responsibilities

The primary functions of this position are to develop, implement, and administer a program for the efficient and economic control of Production capital projects by planning, scheduling, forecasting, and analyzing the costs for all plant betterment projects.

2. Education

Bachelor of Science in Business Administration with majors in Production Management and Personnel Administration; Marquette University, Milwaukee, Wisconsin, 1969.

3. Nuclear Training

Attended a two-week course put on by General Electric in 1977, entitled "Boiler Water Reactor Familiarization".

4. Nuclear Experience

1973-1977. Lead Construction Engineer at the Salem Nuclear Generating Station (2-1100 MW PWRs).

5. Summary

Mr. Raymond J. Clauss, Production Project Control Supervisor, began employment with Florida Power Corporation on June 19, 1979. Prior to this, he worked as the Project Cost Analyst for six months with Florida Power and Light Co. at their Martin Generating Station (2-850 MW Fossil Units). In this position, he supervised all Cost Department functions. He established the guidelines to be used in preparing the project estimate and revised the productivity reporting methods.

Before being employed by FP&L, Mr. Clauss worked for Public Service Electric and Gas Co. of New Jersey, as the Lead Construction Engineer - Cost and Planning and Scheduling. As such, he supervised all Cost and Schedule Control activities at the Salem Nuclear Generating Station. In addition to his supervisory responsibilities, he also trained all P.S.E. & G Cost and Scheduling personnel.

Mr. Raymond J. Clauss is a member of the American Association of Cost Engineers.

## TECHNICAL QUALIFICATIONS

Mr. James E. Colby - Production Engineering, Mechanical Engineer

### 1. Job Responsibilities

The Mechanical Engineer performs and is responsible for mechanical design engineering and/or engineering coordination for nuclear generation related studies, construction work packages, site licensing and other mechanical activities for the Crystal River Unit #3 Nuclear Plant.

### 2. Education

BSE - Duke University - 1970

### 3. Nuclear Training

Introduction to Nuclear Engineering course - 1969.

Nuclear Reactor Theory Course (Senior Tutorial course) - 1970.

Advanced Seismic Pipe Support Design Course by Gilbert/Commonwealth, 1976.

Rules for ISI of Nuclear Power Plant Components, ASME Short Course, 1977.

### 4. Nuclear Experience

Engineer I: June, 1970 - June, 1972. Engineer reporting to the Manager, Mechanical and Structural engineering for assignments on Crystal River Unit #3.

Engineer II: June, 1972 - November, 1972. Responsible to Department Manager for mechanical design and procurement for Crystal River Unit #3. In December, 1972, relocated to site to provide quicker resolutions to various construction, testing, and operational problems. Established on-site engineering office and procedures with a staff of up to 15 people.

Project Engineer: November, 1974 - November, 1977. Named as Field Engineering Supervisor and represented the home office engineering effort at numerous site meetings. Had authority for engineering approval for design changes. Upon completion of nuclear unit, relocated to home office.

Mechanical Engineer: November, 1977 to Present. Responsible to Manager Nuclear Engineering for providing mechanical engineering for the Crystal River Unit #3 Nuclear Plant.

### 5. Other Experience

Nine (9) years experience, including 4-1/2 years on site, with Florida Power Corporation, in the design, construction, startup and operation of Crystal River Unit #3 Nuclear Plant.

Registered Professional Engineer in the State of Florida.

## TECHNICAL QUALIFICATIONS

Mr. M. E. Collins - Reactor Engineer

### 1. Job Responsibilities

The Reactor Engineer is responsible to the Performance Engineering Supervisor for monitoring and evaluating day-to-day operation of the reactor. He is also responsible for all procedures and tests relating to the reactor during power operation and refueling. He has been assigned as the Special Nuclear Material Custodian.

### 2. Education

Electronics Fundamentals, Class A School, U.S. Navy - 1968.

Radar Control, Class A School, U.S. Navy - 1968.

Bachelor of Science, Nuclear Engineering - 1975.

### 3. Nuclear Training

Assistant Reactor Engineer, 1977-1979, Crystal River 3

Physics Test Coordinator, 1978-1979, Crystal River 3

Health Physics and Radiation Protection (3 months), Applied Physical Technology, Georgia Institute of Technology - 1977.

Nuclear Reactor Engineering Training (2 weeks), Babcock & Wilcox - 1979.

### 4. Nuclear Experience

He has a total of 4-1/2 years of nuclear experience. He has been involved with 3 physics startups serving as a Test Coordinator for the last two startups. He has written and updated Zero Power Physics Tests and Power Escalation Tests. He has been an Assistant to the Reactor Engineer for 2 years and had signature authority thereof. In addition, he served as Acting Computer and Controls Engineer for 3 months. He has provided direct supervision to the Maintenance Department including supervision of Control Rod Drive mechanisms, Reactor Coolant Pumps, Incore Instrumentation, the recent installation of the new Transfer Mechanism System, and other nuclear related systems. He has also supervised New Fuel Receipt & Inspection and Refueling Activities.

5. Summary

He worked as a Nuclear Plant Engineer at CR #3 for 4 years, providing direct supervision in many areas (see Nuclear Experience above). His experience as an Assistant Reactor Engineer, Computer and Controls Engineer, and an Electronic Technician provided the background essential for core following techniques and testing requirements.



## TECHNICAL QUALIFICATIONS

Mr. J. Cooper, Jr. - Nuclear Compliance Engineer

### 1. Job Responsibilities

The Nuclear Compliance Engineer is directly responsible to the Technical Services Superintendent for providing assurance that the nuclear plant is being operated and maintained in accordance with the provisions of applicable Federal Regulations, the Plant Operating License, Standard and Environmental Technical Specifications, the Final Safety Analysis Report, the Corporate Quality Manual, and the Plant Operating Quality Assurance Manual. His primary tool is a planned systematic audit program of all plant operating and maintenance functions related to the safety of the plant. He will review safety-related documentation, including Purchase Requisitions for compliance with applicable criteria, written reports based on functional plant reviews and when discrepancies are discovered he will see to it that a Discrepancy Report is generated. He will act as the NRC liaison for all regulatory functions such as inspections and audits. He will assist the Quality Programs Department (FPC) with their audits of the Operating Quality Assurance Plan. The areas of responsibility encompassed by these functions include plant operations, refueling, maintenance, plant modifications, technical support, surveillance testing, environmental monitoring, fire protection, radiation protection, chemistry, security, and administrative services, including training.

### 2. Education

Whitehaven High School, Whitehaven, Tenn. - 1947 (Diploma)

U.S. Naval Electronics Technician School - 52 weeks, 4080 hours.  
(Diploma)

U.S. Naval Instructor School (Diploma)

Electronic Engineering - 18 semester hour credit

U.S. Naval Cryptographic School (Diploma)

Westinghouse Nuclear Instrumentation and Control Engineering School -  
16 weeks. (Certificate)

### 3. Nuclear Experience

He has had a total of nine (9) years of nuclear experience, 6.5 years at H.B. Robinson Nuclear Plant, and 2.5 years at Crystal River Unit #3. While employed at H.B. Robinson, performed the duties as

Senior Instrument Control Technician and Engineering Technician. While employed at Crystal River Unit #3, performed the duties of Compliance Auditor for one (1) year and Compliance Engineer for 1.5 years.

4. Summary

Mr. James Cooper, Jr., Nuclear Compliance Engineer, upon graduation from High School enlisted in the U.S. Navy and served a total of 23 years. The last 15 years of Naval service he performed the supervisory duties of Leading Radar Technician and Senior Chief Petty Officer, Electronics Technician. For a period of 3 years prior to retirement, he performed the duties of Assistant Division Officer on the Naval Repair Tender USS Everglades AD-24. He was the Quality Assurance Supervisor for all performed electronics repairs on various assigned Naval ships. Upon retirement in June 1970, he accepted employment with Carolina Power & Light Co. at the H.B. Robinson Nuclear Plant as an Instrumentation & Control Technician. Worked on a one-to-one basis during plant startup with Westinghouse Engineers in all areas of instrumentation and control. Upon commercial operations was promoted to Senior I & C Technician and worked in this capacity for a period of 3.5 years. He was then transferred to the Engineering staff and assisted in all regulatory compliance functions.

He was employed by Florida Power Corporation as a Compliance Auditor at the Crystal River Unit #3 nuclear plant. He participated in all functions of the Compliance Department and prepared all Licensee Event Reports for approval and submission to the NRC. These job functions required good rapport with the Commission inspectors and extensive knowledge of Regulatory Reporting Requirements.

After one year as a Compliance Auditor, he was promoted to the position of Compliance Engineer and for 1.5 years has assumed the responsibilities of the Compliance Section.

## TECHNICAL QUALIFICATIONS

Mr. B. E. Crane - Planning Engineer-Nuclear

### 1. Job Responsibilities

The Planning Engineer (PE) directly supervises the scheduling and planning of all maintenance activities, assuring all work packages, materials, quality control activities and any other necessary documentation is accurately prepared and completed to the satisfaction of NRC and FPC QA Department audits to economically maintain equipment at the nuclear power plant.

The Planning Engineer directs the development of training for exempt maintenance personnel he supervises on such things as job function, philosophy of management, company policy, handling grievances and administering discipline since these personnel are often functioning in a temporary supervisor capacity.

### 2. Education

Bachelor of Science in Mechanical Engineering, University of South Florida - 1970.

### 3. Nuclear Training

He has a total of 25.5 classroom hours of nuclear training.

### 4. Nuclear Experience

He has a total of 9.5 years of nuclear experience including startup, testing, engineering and plant management.

### 5. Summary

Mr. B. E. Crane, Planning Engineer-Nuclear graduated from the University of South Florida in 1970 with a Bachelor of Science in Mechanical Engineering. Since his graduation from college he has served in the Production Department of Florida Power Corporation beginning with Associate Engineer on the CR-3 plant staff. He advanced to Plant Engineer and performed as Test Superintendent through the startup of Crystal River Unit 3. He then transferred to the Production Engineering Department for 2-1/2 years to perform as a Project Engineer on the CR-3 unit. He finally transferred back to the CR-3 plant staff to his present position. At this time, he will have a total of 9.5 years of nuclear plant experience.

## TECHNICAL QUALIFICATIONS

Mr. David C. Crockett - Project Supervisor

1. Job Responsibilities

Supervise and coordinate plant betterment projects for Production Department. Design, supervise, contract, and coordinate plant maintenance projects for Production Department. Provide structural design and construction service for other departments as requested.

2. Education

Bachelor of Science in Engineering, University of Florida, Gainesville, Florida.

3. Nuclear Training

Attended Florida Power Corporation sponsored in-house NUS Introduction to Nuclear Power Course including reactor physics, reactor operation and rad. chem and protection.

4. Nuclear Experience

None

5. Summary

Fla. State Road Department - Construction Inspector	1-1/2 years
Nat. Morrisson - Construction Superintendent	2 years
Florida Power Corp. - Design	2 years
Univ. of Florida - Staff Instructor	2 years
Georgia Power - Distribution Engineer	1 year
Florida Power Corp. - Manager, Civil Engineering	6 years
Florida Power Corp. - Project Supervisor	4 years

## TECHNCAL QUALIFICATIONS

Mr. Willlliam A. Cross - Nuclear Operations Engineer

### 1. Job Responsibilities

The primary functions of this position are to supply engineering and technical assistance for nuclear plant operations, coordinate forced and scheduled shutdown activities, and assume the duties of the Operations Superintendent in his absence.

### 2. Education

Bachelor of Science Nuclear Engineering Services, University of Florida - 1974.

### 3. Nuclear Training

He has successfully completed NRC Hot License Training at Crystal River Unit 3.

He has completed 3 one-week courses in Nuclear Power Plant Operations on the Babcock and Wilcox Nuclear Power Station simulator.

He participated in a two-week Nuclear Reactor Engineering Training Seminar at the Babcock and Wilcox Nuclear Training Center.

He participated in a one week In-Place Filter Testing Workshop in the Department of Environmental Health Sciences of the Harvard School of Public Health.

### 4. Nuclear Experience

1972-1974 Research and Development in Nuclear Spectrometry, Activation Analysis, and Detector Shielding.  
1974-1975 Nuclear Power Plant Licensing and Nuclear Fuels Planning.  
1975-1979 Supervision and Engineering experience in Plant Engineering, Technical Specification Engineering, Reactor Engineering, and Operations Engineering.

### 5. Summary

Mr. William A. Cross, Operations Engineer, graduated with honors from the University of Florida in 1974 with a Bachelor of Science in Nuclear Engineering Sciences. While in attendance at the U. of F. he worked as a Research Assistant for the Nuclear Engineering Department. He evaluated Activation Analysis and Nuclear Spectrometry for medical and forensic application and designed shielding for gamma spectrum detector systems. For his research he was awarded an IEEE Nuclear Science and Plasma Society Award.

At graduation ne began work with Florida Power Corporation's Environmental and Licensing Affairs Department. He prepared responses for ACRS and Environmental Group items of concern. He evaluated preliminary site data for future nuclear sites and administered population projection studies for Crystal River Unit #3.

For TVA's Nuclear Fuels Planning Section he performed nuclear fuel cycle analysis and cycle length optimization. He investigated in Pu recovery and recycle economics and he developed programs for fuel cycle scheduling.

He began work at Crystal River Unit #3 in August 1975. He has developed procedures for Technical Specification surveillance requirements. He was responsible for procurement, replacement, and testing of air filtration systems. He assisted in design, supervised installation, and tested the sonic decontamination and air exhaust systems. He was a shift data engineer for startup physics testing and a test coordinator for cycle 1E physics testing. He completed NRC Hot License training and was issued a Senior Reactor Operators License (SOP-3122). As Technical Specifications Engineer he administered the STS surveillance program, evaluated nonconforming Operations Reports, and prepared responses for NRC and Quality Programs audits. As Reactor Engineer he coordinated physics testing and fuel shuffle activities. He monitored core performance and depletion. He was responsible for special nuclear materials accountability.

He is a member of the American Nuclear Society.

## TECHNICAL QUALIFICATIONS

Mr. P. Dagostino - Senior Fuel Engineer, Fuel & Special Projects

1. Job Responsibilities

This position reports to the Director, Fuel & Special Projects and has responsibilities for procurement of fossil and nuclear fuel and related services. Also, directs economic and technical studies in fuel for generation.

2. Education

Bachelor of Science Degree in Electrical Engineering, University of Florida - 1968.

Master of Engineering, University of South Florida - 1971.

3. Nuclear Training

A. Nuclear Fuel Power Management - Massachusetts Institute of Technology - 1973.

B. Reactor Physics Course (104-hour) - Florida Power Corp. - 1972

C. Production Staff Nuclear Training Class (48-hour) - Florida Power Corp.

D. Nuclear Operations Quality Assurance Training Program (1-1/2-hour) - Florida Power Corp. - 1978

4. Nuclear Experience

1972-1975 - Fuel Engineer - out-of-core nuclear fuel management activities.

1977 - Present - Sr. Fuel Engineer - out-of-core nuclear fuel management activities

5. Summary

Mr. Dagostino has been responsible for nuclear fuel procurement and management activities for Crystal River #3 as both a Fuel Engineer and Senior Fuel Engineer. This involved consideration of the scheduled requirements and cost for all phases of the fuel cycle including mining, milling, conversion, enrichment, fabrication, and reprocessing.

## TECHNICAL QUALIFICATIONS

Mr. John E. Dawson - Engineering Manager  
Combustion Turbine Projects

### 1. Job Responsibilities

Development of Combustion Turbine Projects scope; provide technical data for permits and licenses (Engineer of Record); initiate and implement engineering activities to meet project schedules; provide and approve cost estimates for budgets, work orders, and scope changes; supervise the performance (project related) of consulting engineers and administer their contracts (this includes furnishing all requested information); supervise the engineering design work performed by FPC Project Engineers; approve all specifications for bidding and drawings for construction; coordinate with other project team members for effective project management; provide for and encourage self-development of Project Engineers; coordinate with people outside FPC (contractors, government personnel, etc.) on project-related activities.

### 2. Education

Newark College of Engineering, Newark, New Jersey

Bachelor of Science in Mechanical Engineering - 1958 (top 10% of class)

Leonia High School, Leonia, New Jersey - Graduated 1948

### 3. Special Training

Nuclear Fuel Management

Nuclear Engineering

Professional Manager Seminar

Engineering Economics

Industrial Electric Power Distribution

Metals Engineering Institute - Non-Destructive Testing Course

### 4. Electric Utility Experience

June 1958 - March 1967 - Engineer (Mechanical), Atlantic City Electric Company. Primary function was to study, plan, design and coordinate various projects in and about generating stations and substations.

March 1967 - June 1971 - Senior Power Engineer, Florida Power Corporation. Responsibilities included mechanical and nuclear design and procurement for new power plant facilities as follows:

510 MW Steam Plant, coal-fired (1969)

850 MW PWR Nuclear Plant

ETibbs(Dawson)D81

456 058



4. Electric Utility Experience (Cont'd)

- 4- 33 MW Jet Powered Peaking Plants (1968)
- 2- 37 MW Jet Powered Peaking Plants (1970)
- 1- 553 MW Steam Plant, oil-fired (1974)
- Oil Conversion of 400 MW Steam Plant
- Oil Conversion of 510 MW Steam Plant

June 1971 - June 1976 - Manager of Special Projects, Generation Engineering Department, Florida Power Corporation. Responsible for Capital Improvement Projects for all existing power plants on Florida Power Corporation's system (including pollution control system installations). Project design and procurement responsibility for the following new power plants and pipelines:

- 4- 50 MW Gas Turbine Units (1972)
- 4- 49 MW Gas Turbine Units (1973)
- 6- 51 MW Gas Turbine Units (1974)
- 2- 69 MW Gas Turbine Units (1974)
- 6- 52 MW Gas Turbine Units (1975)
- 35 Mile - 14" Insulated Oil Pipeline (1973)
- 7 Mile - 12" Insulated Oil Pipeline (1974)

June 1976 - March 1978 - Staff Engineer, Generation Projects. Responsible for planning and engineering management for coal conversion of Crystal River Units #1 and #2.

March 1978 - Present - Engineering Manager, Combustion Turbine Projects

Current projects:

- 3- 50 MW Gas Turbine Peaking Plants (1980)
- Helper Cooling Towers for 1,000 MW existing steam plant (1981)

TECHNCAL QUALIFICATIONS

Mr. Philip E. Dean - Public Information Specialist

1. Job Responsibilities

Prepares News releases; acts as Company spokesman.

2. Education

BA - University of South Florida, Tampa, Florida - 1974

3. Nuclear Experience

None

4. Other Experience

Television Reportor 1974 - 1978

ETibbs (T.SpecPED)D69

456 060

## TECHNICAL QUALIFICATIONS

Mr. Richard S. Dorrie - Quality Engineer  
Quality Programs Department

### 1. Job Responsibilities

The primary function of this position is to audit, evaluate, review, and survey activities subject to the FPC Quality Programs, and to document nonconforming conditions through the use of Nonconformance and Corrective Action Reports (NCR's), audit findings, and review sheets, and to obtain corrective action.

### 2. Education

Bachelor of Building Construction, University of Florida, Gainesville, Florida - 1970.

### 3. Nuclear Training

None

### 4. Nuclear Experience

1972 - 1977. Involved with the construction and preoperational testing of Crystal River Unit #3 as a member of the FPC Quality Assurance/Quality Surveillance Teams.

1977 - Present. Involved with Crystal River Unit #3 Plant on a day-to-day basis as a member of the FPC Quality Programs Department involved in review and audit activities of plant functions.

### 5. Summary

Mr. Richard S. Dorrie, Quality Engineer, began employment with Florida Power Corporation on July 26, 1972. Prior to that and since graduation, he was employed by United Engineers and Constructors, Inc. at the Pennsylvania Power & Light Co. Martins Creek Steam Electric Station as an Assistant Structural Supervisor.

As such, he was involved in the construction of foundations for the power plant, site clearing and grade, and material takeoffs for weekly cost control reports. Upon arriving at Crystal River Unit #3, he was involved in the Quality Surveillance of structural activities, primarily reinforcing steel and concrete placement.

Since July 1977, Mr. Dorrie has been based in St. Petersburg, in the Quality Programs Department.

## TECHNICAL QUALIFICATIONS

Quentin B. DuBois - Director, Quality Programs

### 1. Job Responsibilities

Responsible for management and implementation of the Quality Assurance Programs for Florida Power Corporation.

### 2. Education

B.A. Physics - University of South Florida, Tampa, Florida - graduated 1965.

M.S. Nuclear Engineering Sciences - University of Florida, Gainesville, Florida - graduated 1967.

Engineer Degree, Nuclear Engineering Sciences - University of Florida, Gainesville, Florida - graduated 1968.

### 3. Nuclear Experience

January, 1969 - March, 1972, Babcock & Wilcox Co., Nuclear Power Generation Division, Lynchburg, Virginia

Reactor Physicist - Design and safety analysis studies of advanced reactor concepts. Design studies and core performance studies of B&W Pressurized Water Reactors.

April, 1972 - October, 1973, Florida Power Corporation, St. Petersburg, Florida

Supervisor, Nuclear Affairs - responsible for nuclear licensing, safety analysis and power plant siting.

October, 1973 - August, 1974, Florida Power Corporation, St. Petersburg, Florida

Manager, Nuclear Affairs - responsible for nuclear licensing, safety analysis, power plant siting and environmental reports. Prime working level contact with United States Atomic Energy Commission staff.

August, 1974 - May, 1975, Florida Power Corporation, St. Petersburg, Florida

Engineering Manager, Nuclear Projects - responsible for engineering and design of future nuclear generating stations for Florida Power Corporation.

June, 1975 - May, 1977, Florida Power Corporation, St. Petersburg, Florida

Acting Manager, Nuclear Operations - responsible for operation of Crystal River Unit No. 3. Includes supervision of home office support staff in the areas of core analysis, licensing, radiation protection and environmental matters.

3. Nuclear Experience (cont'd)

May, 1977 - September, 1978, Florida Power Corporation,  
St. Petersburg, Florida

Manager, Nuclear Support Services - responsible for the home office support of Crystal River Unit No. 3, including core analysis, nuclear fuel management, nuclear licensing, radiation protection, environmental impacts and special problem solving.

September, 1978 - Present, Florida Power Corporation, St. Petersburg, Florida

Director, Quality Programs Department - responsible for the management and implementation of the Quality Assurance Programs for Florida Power Corporation.

Additional Related Experience

- Served as Manager, Offsite Radiological Support Team, June, 1975 - September, 1978.

- Served as member of Nuclear General Review Committee, March, 1973 - July, 1979 (currently Vice Chairman).

## TECHNCAL QUALIFICATIONS

Mr. Kenneth M. Elder - Production Engineering, Engineer II

1. Job Responsibilities

Perform technical engineering required to develop, complete, and coordinate the design, estimating, and procurement of projects for Crystal River, Unit #3 Nuclear Plant.

2. Education

BSASE - University of Florida, 1974  
MSME - University of Florida, 1975

3. Nuclear Training

Nuclear Engineering Course given by University of Florida Nuclear Engineering Department, 1973

Radiation Control Course given by Florida Power Corporation, 1977

Safety Related Engineering Procedures given by Florida Power Corporation, 1978

4. Nuclear Experience

Florida Power Corporation: Engineer II, December, 1977 to Present.  
Performed engineering activities for projects at Crystal River Unit #3 Nuclear Plant.

5. Other Experience

Tampa Electric Company: One and one-half (1-1/2) years experience in engineering of steam and gas turbine power generating units.

Florida Power Corporation: One-half (1/2) year's experience in engineering of fossil and gas turbine power plants.

Registered Professional Engineer in the State of Florida

## TECHNICAL QUALIFICATIONS

Mr. H. M. Embach - Shift Supervisor

1. Job Responsibilities

Responsible to the Operations Engineer to plan, supervise and coordinate the duties and training of operating personnel assigned to his shift. Serves in an advisory consulting capacity as regards to plant operations. Is responsible for all operating activities and is the sole authority at the plant when immediate supervisors are not present.

2. Education

High School Graduate

3. Nuclear Training

He has had a total of 83.2 weeks (1.6 years) of classroom training including Phase 1, 2, 3, 4, 5, and 6 as stated in the Section 12.2.

4. Nuclear Experience

He has had a total of 8.7 years of nuclear experience including engineering design, design review, design supervision, startup, testing and practical operating experience.

5. Summary

Mr. H. M. Embach, Shift Supervisor, joined Florida Power Corporation on October 30, 1950. He started in the Production Department at the George E. Turner Electric Generating Plant at Enterprise, Florida. Mr. Embach started working at the lowest job classification, that of Plant Helper, and worked his way up to Switchboard Operator. He held this position for a total of 423 weeks. During this time, he has had extensive experience in plant operations. He has witnessed normal and abnormal experiences during the period when Florida Power's growth was rapidly expanding. Mr. Embach was active in the startup activities of two (2) 75 MWe fossil units (No. 3 and No. 4) at the Turner Plant. At the time of Crystal River Unit #3's initial core loading, he will have 23 years of service with the Florida Power Corporation.

He will have acquired the experience and satisfactorily completed an NRC approved training program which utilizes a complete and accurate nuclear power plant simulator as part of the required program for examination by the NRC for a Senior Reactor Operator's License. He has passed the examination and all required requalification examinations and has been issued NRC License No. SOP 2650.

ETibbs(T.SpecHME)D4

## TECHNICAL QUALIFICATIONS

Mr. Harry A. Evertz, III - Senior Counsel

1. Job Responsibilities

In the event of a nuclear incident, Senior Counsel would provide legal counsel to management and field personnel with regard to damage claims under the Company's nuclear insurance.

2. Education

Bachelor of Science in Business Administration, Stetson University, DeLand, Florida, 1959; J.D., Stetson University College of Law, St. Petersburg, Florida, 1960.

3. Nuclear Training

Seminars on nuclear power conducted by Atomic Industry Forum (AIF); seminars on licensing by AIF and ALI-ABA.

4. Nuclear Experience

Attended Construction Permit Hearing on Turkey Point 3 and 4, Vermont Yankee, Oconee 1, 2 and 3, and Three Mile Island. Conducted as Co-Counsel, Construction Permit Hearing on Crystal River 3.

5. Summary

Mr. Evertz began employment with Florida Power Corporation on August 1, 1962. His responsibilities have included the legal aspects of licensing, Crystal River 2, including antitrust review by the U.S. Department of Justice.



## TECHNICAL QUALIFICATIONS

Mr. D. M. Farless - Technical Support Supervisor-Nuclear

1. Job Responsibilities

The Technical Support Supervisor is responsible to the Maintenance Superintendent for the operation and maintenance of all plant nuclear and non-nuclear instrumentation including the computer. He is also responsible for the operation and maintenance of all control systems.

2. Education

High School Diploma

3. Nuclear Training

He has had a total of 39 weeks (0.8 years) of classroom training including Phase 1, 2, 4, 6 and 7 as stated in Section 12.2.

4. Nuclear Experience

He has a total of 7.5 years of nuclear experience including: Journeyman (5.6 years), Chief of Instrumentation (1 year) and supervisor of instrumentation (.9 year).

5. Summary

Mr. Denver M. Farless, Technical Support Supervisor began employment with Florida Power Corporation on September 23, 1957 in Avon Park Steam Plant as a laborer A in the Production Department. He was promoted to Auxiliary Operator before transferring to Inglis Steam Plant as a Boiler Operator. He was promoted to switchboard operator and then to plant operator before transferring over to Crystal River Unit #1 to Instrument Mechanic Apprentice in 1967. He has completed courses in industrial instrumentation from I.C.S. and also an industrial electronics and a solid state electronics course from R.C.A. He advanced to Control Technician and worked in that position through startup of Crystal River Unit #2. He was awarded a Nuclear Technical Support Technician job in December of 1969. Since that time, he has participated in our nuclear academic training, nuclear facility training at North Carolina State University and in the Bailey Meter Company's Instrumentation courses. Since then he has advanced to Chief Nuclear Technical Support Technician and then awarded the Technical Support Supervisor position. In this capacity he supervises all of Crystal River Unit #3 instrumentation, nuclear and non-nuclear, site security instrumentation, computer, and has the calibration laboratory under his supervision.

## TECHNICAL QUALIFICATIONS

Mr. Robert L. Feldhusen - Telecommunication Field Supervisor

1. Job Responsibilities

Coordinate the installation of telecommunication equipment in the Suncoast Division. Supervise the maintenance of such equipment and maintain liaison with other areas to coordinate maintenance activities on a system basis.

Maintain stock of necessary electronic parts at proper levels.

Conduct training sessions to qualify assistant technicians for upgrade when positions are available.

2. Education

High School and technical schooling.

3. Nuclear Training

None

4. Nuclear Experience

None

5. Summary

Began employment with Florida Power Corporation in 1974. Prior experience with radar companies in Signal Corps. Employment in Florida Power Corporation has covered areas of telecommunications including engineering, procurement, design of systems, supervision of installation and maintenance.

## TECHNICAL QUALIFICATIONS

Mr. David E. Fergusson - Production Projects Supervisor

### 1. Job Responsibilities

Responsibilities of this position are to review and determine construction action for most economical and expeditious methods for Production Department betterment projects. Procure and supervise the necessary labor force to install in the field. Responsible for cost control, modifications, testing and compliance to design requirements.

### 2. Education

H.N.C. in Electrical Engineering, Carlisle Technical College, England.

No Nuclear training or experience.

### 3. Experience

Electrical apprenticeship (5 years)

Aviation electrical maintenance and testing -

Royal Air Force (2 years)

Vickers Armstrong (5 years)

Rocket testing/design - Hawker Siddeley (9 years)

Aircraft electrical testing - Boeing Vertol (2 years)

Gas turbine electrical design and testing -

Turbo Power & Marine (4 years)

Florida Power Corporation - Electrical & Controls Engineer

(4 years)

Florida Power Corporation - Project Supervisor (1-1/2 years)

ANCLOTE PLANT

NAME Don I. Flynn

TITLE Plant Manager

EDUCATION BSEE

TECHNICAL EXPERIENCE (MAN-YEARS)

a. ENGINEERING

(1) ENGINEERING MANAGEMENT 10 Years

(2) TOTAL UTILITY EXPERIENCE 22 Years

b. FIELD

- |                                | <u>F</u> | <u>N</u> |
|--------------------------------|----------|----------|
| (1) ELECTRICAL ENGINEERING     |          |          |
| (2) MECHANICAL ENGINEERING     |          | X        |
| (3) MECHANICAL MAINTENANCE     |          | X        |
| (4) ELECTRICAL MAINTENANCE     |          |          |
| (5) INSTRUMENT & CONTROL MTCE. |          | X        |
| (6) CHEMISTRY                  |          |          |
| (7) POWER PLANT OPERATIONS     |          | X        |

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(DIF)D83

456 070

## TECHNICAL QUALIFICATIONS

Michael B. Foley, Jr. - Executive Assistant to the Senior Vice President,  
Engineering & Construction

### 1. Job Responsibilities

The primary function of this position is to assist the Senior Vice President in all the many facets of managing the design and construction of power plants, transmission lines, substations, and buildings, and the operation and maintenance of production facilities, including nuclear power plant, Crystal River Unit No. 3.

### 2. Education

Bachelor of Science in Engineering - University of South Florida,  
1967, Energy Conversion Specialty.

Master of Business Administration - Florida Institute of Technology,  
1978.

### 3. Nuclear Training

Radiation Protection and Chemistry Course, 20 weeks in duration,  
February 1974 - Dr. Neils Diaz, University of Florida/NUS.

Taught formal course in heat transfer to sections of the NRC Reactor Operators License Course at Crystal River Unit No. 3.

### 4. Nuclear Experience

No direct operating experience.

### 5. Summary

Mr. Michael B. Foley, Jr., Executive Assistant to the Senior Vice President, Engineering & Construction, began employment with Florida Power Corporation on June 1, 1971. During his employment with Florida Power, he has also held the positions of Results Engineer for the Production Department for three years and Manager of Generation Planning for the Corporate Planning Department for four years.

Prior to employment with Florida Power, from June 1967 to June 1971, he worked for Georgia Power Company, holding several engineering and supervisory positions with that company's Production Department, including operations responsibilities in a major fossil-fueled power plant, and a staff position in the headquarters of the Production Department.

Michael B. Foley, Jr. - (Cont'd)

As such, he has extensive experience in the operations and management of power production facilities.

He is a Registered Professional Engineer in the State of Florida.

ETibbs(T.SpecMBF)D73

456 072

## TECHNCAL QUALIFICATIONS

Mrs. Clide M. Forte - Production Engineering, Engineer I

1. Job Responsibilities

Perform engineering tasks relating to design, application or modification of mechanical equipment and/or systems for new and existing generating facilities.

2. Education

BSME - University of South Florida, 1978

3. Nuclear Training

Safety related engineering procedures given by Florida Power Corporation, 1978.

4. Nuclear Experience

None

5. Other Experience

September, 1976 - March, 1978: Co-op or part-time work with Florida Power Production Department.

April, 1978 to Date: Florida Power Corporation. Experience in engineering of fossil and gas turbine power plants.

Engineer in Training, State of Florida

## TECHNICAL QUALIFICATIONS

Mr. Richard O. Frazee - Assistant to Manager Production Engineering

### 1. Job Responsibilities

Provide staff guidance and support, in power plant engineering and related matters to the Manager Production Engineering. Provide power plant engineering consulting services to entire Power Production Department, Generation Projects Department and other company departments as requested. Provide for independent second level review of all "safety related modifications" to Crystal River Unit #3 Nuclear Plant.

### 2. Education

BSME - University of South Florida, 1968  
MSME - University of South Florida, 1970

### 3. Nuclear Training

Nuclear Engineering I, 1970 - University of South Florida

Quality Assurance, Design for Access and Inservice Inspection of Nuclear Power Plants, 1977 - Southwest Research Institute.

Piping Design and Stress Analysis, 1976 - University of California, Los Angeles.

### 4. Nuclear Experience

Florida Power Corp.: Associate Engineer, August 1970 - June, 1971. Various design and procurement assignments on Crystal River Unit #3 Nuclear Plant. Chief Generation Mechanical Engineer, September, 1974 - November, 1977. Manage mechanical engineering section including mechanical engineers on Crystal River Unit #3. November, 1977 to date: Current position.

### 5. Other Experience

Nine (9) years experience with Florida Power Corporation with experience not covered above, as follows:

Mechanical engineer on various gas turbine installations (Total 540 MW).

Mechanical engineer for various fossil steam plant modifications. Manage mechanical engineers on 300 MW gas turbine and 515 MW steam units for design and startup.

Registered Professional Engineer in State of Florida.

Member: American Society of Mechanical Engineers  
Florida Engineering Society



## TECHNICAL QUALIFICATIONS

Mr. John D. Freitag - Manager, Risk Management Department

1. Job Responsibilities

Responsibilities of this position as they relate to the nuclear facility involve analysis and measurement of risks associated with operation of plant, purchase of insurance to cover defined risks, maintaining liaison with insurance company engineers as relates to plant inspections, follow-through on all inspection recommendations to ensure implementation, and filing of all property and liability claims. Authority is commensurate with responsibility.

2. Education

Bachelor of Science in Business - Engineering Administration from MIT, Cambridge, Mass.; Graduate studies in Business Administration at Hofstra University, Hempstead, New York.

3. Experience

Senior Analyst with an Economic and Financial Consulting firm in Washington, D.C. - 8 years. In present position since February 1979. Member of EEI Insurance Committee. Member Offsite Radiological Support Team.

## TECHNICAL QUALIFICATIONS

Mr. A. E. Friend - Senior Core Analysis Engineer

1. Job Responsibilities

The Core Analysis Engineer is responsible for reactor mathematical model development and use, core nuclear data generation, reactor performance analysis (static and dynamic) and fuel economics and management strategies. He is responsible for core data reduction and the coordination of reactor analysis results and reactor operation to insure the most efficient and safe nuclear fuel utilization. He is also responsible for reload fuel enrichment and shuffle pattern predictions and the technical evaluation of reload fuel proposals.

2. Education

Bachelor of Science in Electrical Engineering, University of Florida - 1967

3. Nuclear Training

He has had a total of 100 weeks (1.92 years) of classroom training including reactor core analysis, fuel management, and inservice inspection techniques.

4. Nuclear Experience

He has had ten years of nuclear experience including plant design, design supervision, physics testing, startup, physics calculations, incore fuel management and licensing.

5. Summary

Mr. Friend graduated from the University of Florida in 1967 with a Bachelor of Science in Electrical Engineering. Since his graduation, he has served Florida Power Corporation in the Load Dispatching Department for 20 months where he was involved in system generation, maintenance and testing scheduling as well as transmission system simulation and operation. After joining the Nuclear Plant Staff, he participated in the definition and programming of the computer-automated turbine startup and plant performance calculations. He was also involved in design reviews of plant instrumentation. He later participated in an in-depth core analysis training program conducted by S.M. Stoller Corporation and aided in the setting up of the computer reactor model used for core follow. He has also been involved in the development and review of plant operating and testing procedures as a member of the Plant Review Committee. He is involved in reload physics test program definition, core related technical specification review, physics test data reduction and startup report definition. He is a member of the American Nuclear Society.

## TECHNICAL QUALIFICATIONS

Mr. Edwin E. Froats - Manager, Quality & Reliability Engineering

### 1. Job Responsibilities

The function of this position is management of Quality Program reviews, audits, training and reliability studies to assure that the plant operation complies with applicable codes, regulations, standards, specifications and other design documents.

The following duties are performed by the Manager, Quality & Reliability Engineering:

- A. Manage reviews of Quality Programs, procedures, and other documents to assure compliance with governing codes, standards, and regulations. This activity is performed by coordinating, scheduling, evaluation, and approving results of reviews performed by personnel under my direction.
- B. Manage activities associated with Quality training, auditor training, and nondestructive examination training and qualification. This is done to fulfill regulatory requirements as well as to upgrade knowledge and skills internal to FPC. This activity is accomplished by development of formalized training programs, scheduling and conducting training sessions, and certifying qualified individuals.
- C. Manage the development of special programs to support the needs of various generation projects. This is accomplished by consulting with department heads and project managers on methods to assure compliance with applicable codes, regulations, standards, and specifications and the formulation of written programs for their approval and use.
- D. Manage a Quality and Reliability Engineering Program to provide a means upon which various management levels may base decisions regarding corrective action. This is done through development of programs for evaluating positive or negative trends, material or NDE Engineering analysis or reliability studies and the dissemination of information obtained to appropriate management.
- E. Manage the development and revision of procedures in order to upgrade quality programs applications in a cost effective manner consistent with overall company objectives and commitments. This is accomplished by regular review of needs and regulations and promulgation of necessary procedures of revisions to meet them.

- F. Provide evaluations of the effectiveness of the FPC Quality Program and immediate notifications of matters of serious noncompliance to the Director, Quality Programs, so that appropriate higher management decisions or actions can be made and taken in a timely fashion. These evaluations/notifications are performed based on decisions about in-process work and/or records of activities.

2. Education

BCE - Bachelor of Civil Engineering, University of Florida - 1963.

3. Nuclear Training

Nuclear Engineering Training - Completed fifteen (15) weeks comprehensive undergraduate Introduction to Nuclear Engineering course for company engineers and supervisors.

4. Professional Experience

A. Quality Assurance:

1977 to Present - Manager, Quality & Reliability Engineering with Florida Power in Quality Programs Department.

1972 to 1977 - Manager, Site Surveillance (nuclear) with Florida Power Corporation in Quality Programs Department. Responsible for on-site management of the Quality program of Crystal River Unit #3 (nuclear).

1968 to 1972 - Quality Engineer with Florida Power Corporation in Generation Quality and Standards Department. Assisted in the formulation and development of the Quality program for Crystal River Unit #3. Member of the original Florida Power Corporation Nuclear Project Team.

B. Summary of Non-Quality Assurance Experience:

1963 to 1968 - Mr. Froats has been primarily responsible for design engineering of steel tower foundations. He has been responsible for transmission line right-of-way evaluation, preparation of specifications for line construction and maintenance and preparation of procurement requisitions. As an engineer with Florida Power Corporation in Transmission Construction and Maintenance Department, he has been responsible for supervision of contractors involved with construction of transmission foundations.

Mr. Edwin E. Froats (Cont'd)

5. Professional Accomplishments/Affiliations

- A. Registered Professional Engineer in Quality Engineering,  
California Certificate No. QU 2376.
- B. Associate Member of the American Society of Civil Engineering.
- C. Chairman of Southeastern Electric Exchange Quality Assurance  
Committee, 1979-80.

ANCLOTE PLANT

NAME Glen N. Garrison

TITLE Shift Supervisor

EDUCATION High School  
1-1/2 Years Junior College  
7 months Diesel Operation &  
Maintenance

TECHNICAL EXPERIENCE (MAN-YEARS)

- a. ENGINEERING
  - (1) ENGINEERING MANAGEMENT
  - (2) TOTAL UTILITY EXPERIENCE
- b. FIELD
  - (1) ELECTRICAL ENGINEERING
  - (2) MECHANICAL ENGINEERING
  - (3) MECHANICAL MAINTENANCE
  - (4) ELECTRICAL MAINTENANCE
  - (5) INSTRUMENT & CONTROL MTCE.
  - (6) CHEMISTRY
  - (7) POWER PLANT OPERATIONS

F

N

31

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ET1bbs(GNG)D83

456 080

ANCLOTE PLANT

NAME Robert W. Gates

TITLE Shift Supervisor

EDUCATION High School

TECHNICAL EXPERIENCE (MAN-YEARS)

a. ENGINEERING

(1) ENGINEERING MANAGEMENT

(2) TOTAL UTILITY EXPERIENCE

21 Years

b. FIELD

(1) ELECTRICAL ENGINEERING

(2) MECHANICAL ENGINEERING

(3) MECHANICAL MAINTENANCE

(4) ELECTRICAL MAINTENANCE

(5) INSTRUMENT & CONTROL MTCE.

(6) CHEMISTRY

(7) POWER PLANT OPERATIONS

F

N

X

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ET1bbs(RWG)D69

456 081

## TECHNICAL QUALIFICATIONS

Mr. Alfonso L. Gomez - Production Engineering, Manager of Engineering,  
Fossil Units

### 1. Job Responsibilities

The function of this position is the management of Florida Power Corporation's power plant design of electrical generating facilities' modifications to existing fossil generating facilities.

### 2. Education

Electrical Engineering Degree, University of Havana, Cuba - 1955.  
Majoring in Power Systems, minor in Mechanical Engineering.  
Participated in General Electric training program for graduate engineers - 1955-1956. As such, spent time testing electrical apparatus in various General Electric division, namely D.C. motors and generators, medium size steam turbine division; large A.C. motors and generators, industrial type control systems.

Post-graduate courses at University of South Florida, mostly power system analysis.

Licensed Professional Engineer in the State of Florida since 1968.

### 3. Nuclear Training

Heavily involved in the design of Crystal River Unit #3 Nuclear Plant. Participated actively in the approval of elementaries of control systems for Crystal River Unit #3 Nuclear Plant.

### 4. Nuclear Experience

Participating in electrical and control engineering design of Crystal River Units #3 and #4 - definition of criteria for auxiliary power systems.

Made several vendor inspection trips, witnessing of tests as they related to the Quality Control section in the specification.

### 5. Other Experience

Working on power plant design and construction since 1957. Also participated in the design of substations up to and including 400 KV.

Participated in the construction of eight (8) power plants including gas turbine type installations.

Actively participated in the testing of those units.



## TECHNICAL QUALIFICATIONS

Mr. Edwin M. Good - Production Engineering, Project Engineer (I&C)

1. Job Responsibilities

Project Engineer, responsible for the Nuclear Power Plant, (CR-3), Instrumentation and Control engineering design and technical evaluations as assigned by the Manager, Nuclear Engineering. Responsible for coordination of design with outside consultants and manufacturers.

2. Education

BSEE - Indiana Institute of Technology, Ft. Wayne, Indiana - 1960  
Master of Business Administration, Florida Institute of Technology, Melbourne, Florida - 1978.

3. Nuclear Training

Nuclear Power Course given at the Engineers Club of Philadelphia, Pa., 10 week course, 1971.

4. Nuclear Experience

Gilbert Associates, Inc.: I&C Engineer, 1966-1969. Design of control systems for RG&E Ginna Station Unit #1, included one year at site during construction, and startup through cold hydro, hot functions, fuel loading and initial plant operation. I&C Engineer: January - June, 1970. Design of control systems for waste disposal and water treatment areas of Three Mile Island One. Lead Engineer: June - December, 1970. Design of Instrumentation and Controls for Crystal River Unit #4.

Florida Power Corporation: January, 1971 - March, 1977. Design of I&C systems for Crystal River Nuclear Plant, (CR-3), including vendor coordination and construction and operations liaison. Chief Control Engineer, August, 1974 - November, 1977, responsible for Instrumentation and Control design in the Crystal River Nuclear Plant (CR-3), as well as the Fossil Plants. Project Engineer, November, 1977 - Present. Continuing Instrumentation and Control design review licensing and modifications as required to provide plant operability and reliability.

5. Other Experience

Three years in the U.S. Navy, in the engineering department on a steam plant cargo ship. Presently attached to a naval nuclear submarine squadron as Asst. Material Officer where I have had some additional experience during three (3) 2-week active duty periods for training at a Submarine Squadron Command.

Worked two (2) years for a utility with one (1) year as Plant Engineer in a fossil plant.

Total of fifteen (15) years of power plant experience, excluding U.S. Navy, of which twelve (12) years have been in the nuclear area. Much of the nuclear experience has been with NSSS interface and balance of plant equipment. Other experience includes licensing, QA spare parts recommendations and documentation, and equipment/system replacement design and specification.

Member of ISA NPPSC Committee, and topical Subcommittee Chairman responsible for four (4) Nuclear Standards.

Registered Professional Engineer in the States of Florida and Pennsylvania.

## TECHNICAL QUALIFICATIONS

Mr. P. E. Griffith - Training Supervisor

### 1. Job Responsibilities

The Training Supervisor is required to plan, schedule, coordinate and develop training, retraining, and replacement training of licensed Operators, Electrical and Mechanical Maintenance Technicians, Chemistry and Radiation Protection Technicians, Technical Support Technicians and Plant Engineers. He is required to plan and coordinate emergency training and drills. He will maintain training qualifications and re-qualification documentation and records.

### 2. Education/Nuclear Training

Maynard Evans High School, Orlando, Florida - 1961.

U.S. Navy Class "A" School (Interior Communications Electrician), San Diego, California (14 weeks) - 1961-1962. Courses in theory, operation and maintenance of electronic and electro-mechanical systems.

Basic Submarine School, New London, Connecticut (8 weeks) - 1962. Theory and operation of submarines and equipment.

Nuclear Power School, Bainbridge, Maryland (24 weeks) - 1963. Course in mathematics, classical and nuclear physics, engineering materials, thermodynamics, reactor theory and plant principles and electronics.

Advanced Nuclear Power School, Knolls Atomic Power Laboratory, West Milton, New York (28 weeks) - 1963-1964. Courses in reactor control equipment, reactor principles and operation. Qualified Reactor Operator and Reactor Technician.

Basic Transistor School, Advanced Submarine School, New London, Connecticut (3 weeks) - 1966. Course in theory and applications of transistors.

Basic Sonar Watch Standing School, Advanced Submarine School, New London, Connecticut (1 week) - 1967. Course on the physics of sound in water.

721 Integrated Control System Maintenance, Bailey Meter Co., Wycliffe, Ohio (2 weeks) - 1969. Application and maintenance of Bailey 721 system components.

Link GP-4B Maintenance, Singer-Link, Lynchburg, Virginia (3 months) - 1970. 3 weeks programming and 9 weeks theory and maintenance of GP-4B computer.

2. Education/Nuclear Training (Cont'd)

Capitol Radio Engineering Institute, Washington, D.C. - 1971. Nuclear Engineering Technology Correspondence Course in theory and application of electronic circuits as applied to nuclear instrumentation, reactor theory, math and health physics.

Industrial Psychology, one quarter, University of South Florida - 1978. Organizational Psychology, behavior of people in organizations, motivation and leadership theories.

Management for Supervisors, FPC-sponsored (4 days) - 1979. Motivation and understanding human behavior by transactional analysis.

Professional Engineer's Exam Review Nuclear, one quarter - 1979. Reactor theory including design calculations, steady state, kinetics, feedback mechanisms. Thermodynamics and heat transfer in the reactor and fuel and fuel cycle economics.

3. Nuclear Experience

1975 - Present - Training Supervisor responsibilities listed before. Have also worked as Mechanical Supervisor rebuilding RC pumps, Outage Shift Manager for 1979 refueling outage and was On-site Tech. Support at TMI-2.

July 1972 - November 1975 - Babcock & Wilcox Company, Training Section Simulator Instructor for one year. Responsibilities included instruction in operation of 850 MWe class PWR, instrumentation and controls, and mechanical systems for B&W customers and engineers.

Arkansas Nuclear One Training Coordinator for one year. Responsible for planning, scheduling and implementation of training programs to prepare candidates for USNRC Cold License Exams. During this time, also prepared myself and obtained a Senior Reactor Operator Cold License on the Arkansas facility.

Upon completion of training, was reassigned as Shift Test Engineer for fuel loading, zero power physics, and power escalation sequence testing. Responsibilities as a Shift Test Engineer included direct control over all physics testing and coordination and control (either direct or indirect) over other phases of testing. During my shift operations, many significant events occurred including: initial criticality, initial escalation into the power range and initial escalation to 100% full power.

After declaration of commercial operation at Arkansas, B&W transferred me to the Crystal River site as the B&W Site Mechanical Engineer.

3. Nuclear Experience (Cont'd)

Responsibilities included support of Florida Power Corporation in solving mechanical problems related to the B&W nuclear steam supply. Also supplied support in the area of instrumentation and controls; specifically, calibration data and development of procedures for testing of the integrated control system. After approximately six months, reassigned as Mechanical Test Engineer and ran tests on NSS and secondary plant systems for approximately three months.

October 1971 - July 1972 - Bailey Meter Company, Wycliffe, Ohio, Reactor Protection and Engineered Safeguards Group. Responsible for writing reactor protection and engineered safeguards technical manuals including systems descriptions, calibrations and testing procedures.

December 1969 - October 1971 - Babcock & Wilcox Training Department. Duties included Simulator Instruction on B&W nuclear simulator. In charge of maintenance and calibration of integrated control system. Set up maintenance and calibration programs.

August 1968 - December 1969 - Babcock & Wilcox Field Engineering. Responsible for preparation of instrument and control system operating procedures including integrated control system, reactor protection and engineering safeguards for Duke Power Company. Also conducted training in instrumentation and control systems for Duke Power Company and Metropolitan Edison Company.

1964 - 1968 - USS Nautilus (SS(N)571) (nuclear submarine). Reactor Operator and technician responsible for supervision, operation and maintenance of PWR and its associated nuclear instrumentation and control devices. Electric power plant and steam plant Control Operator, responsible for supervision, maintenance and proper operation of associated systems controls devices.

Other experience during this period includes two years of major ship and equipment overhaul. One year of underway operational responsibility and one year refueling. In addition to the above, but with no reference to the nuclear field, have worked as an electronics technician in the radar and electronics countermeasures field.

1963 - 1964 - United States Nuclear Power Training Unit, Knolls Atomic Power Laboratory, West Milton, New York - Qualified as U.S. Navy Reactor Operator.

1962 - 1963 - USS Thornback (SS 418) (Submarine), leading seaman in charge of deck hands.

Mr. P. E. Griffith (Cont'd)

4. Summary

Mr. Griffith held a Senior Reactor Operator License on Arkansas Power & Light's Babcock & Wilcox Unit (Arkansas Nuclear One). At the time of Crystal River Unit 3's initial core loading, Mr. Griffith will have 14 years of responsible nuclear experience and hold a SRO on CR-3.

## TECHNICAL QUALIFICATIONS

Mr. John A. Hancock - Project Manager, CR 4/5 Project

### 1. Job Responsibilities

To assure that the Crystal River Units 4 and 5 are designed, constructed and in-service on schedule and within budget. Must make this happen consistent with corporate policies and objectives and with the full use of internal/external resources as required to do the job.

### 2. Education

BS Physics, N.C. State University - 1963.

MS Nuclear Engineering, Catholic University of America - 1965.

Courses only: Nuclear Engineering, University of Florida - 1966.

### 3. Nuclear Training

#### A. Nuclear Power Plant Engineer Course

U.S. Army Nuclear Power Program. 6 weeks - 8 hours/day - 1963. Included 3 weeks of on-shift operation of the SM-1 PWR Nuclear Power Plant.

#### B. University of Florida Training Reactor

Approximately 3 months of informal study and operations in preparation to be examined for an AEC Senior Reactor Operators License for this 100 kw research reactor.

#### C. Nuclear Engineering Training

Instructed undergraduate nuclear engineering courses at: University of Florida - 1967, University of South Florida - 1970, and Florida Power Corporation - 1968.

#### D. Florida Power Corporation Nuclear Training Program for Crystal River Unit #3

During the period 1967 - 1969, was largely responsible for the development of the company's total nuclear training effort.

### 4. Nuclear Experience

#### A. Engineering

1963 - 1966. Functioned as a physicist and nuclear engineer with the U.S. Army Nuclear Power Program and involved exposure to and problem

solving in essentially all areas of nuclear power plant design and operation.

1967 - 1971. Functioned as nuclear engineer and senior nuclear engineer in the Generation Engineering Department of Florida Power Corporation during this four year period in the design and construction of Crystal River Unit #3. This activity included primary in-company responsibility for nuclear safety and engineering, training, and later, during this period, licensing and environmental aspects.

B. Startup and Testing

1964. Functioned as nuclear engineer (calibration) during the factory testing and plant installation and testing of an advanced radiation monitoring system for the SM-1 nuclear power plant.

1964. Functioned as nuclear engineer during the refueling and startup of the SM-1A nuclear power plant.

1966 - 1967. Functioned as Reactor Supervisor of the University of Florida Training Reactor responsible for the operation of the facility as a research and training tool. Held USAEC Senior Reactor Operator's License. Logged at least 75 cold startups and supervised the complete disassembly and reassembly of the facility (including refueling) twice. Supervised the daily conduct of research and testing, and included nuclear and radiological safety responsibilities in addition to the supervision of other licensed operators.

C. Operations

1963. SM-1 Nuclear plant on-shift equipment and control room operator - 3 weeks.

1966 - 1967. University of Florida Training Reactor - operated or directly supervised operation for a minimum of nine months as an AEC Senior Reactor Operator Licensee. This would include at least seven months of this time directly within the facility.

D. Safety

1965. Responsible for development and implementation of radiological safety plan associated with plutonium-beryllium neutron source experiment as part of Master's degree thesis investigation.

1966 - 1967. Responsible for nuclear operational and radiological safety at the University of Florida Training Reactor during its daily research and training operation for a minimum of 9 months.



## TECHNICAL QUALIFICATIONS

Mr. J. H. Harrison - Assistant Chemistry and Radiation Protection Engineer

### 1. Job Responsibilities

The Assistant Chemistry and Radiation Protection Engineer is responsible for providing continual and/or intermittent in-plant technical expertise supporting the overall Florida Power Corporation Radiation protection, Radiochemistry, Water Chemistry, and Waste Management Programs for Nuclear Power Generation and to provide support in other technical areas as may be directed by the Chemistry and Radiation Protection Engineer.

### 2. Education

Bachelor of Science in Agriculture, A.C.S.  
Approved major in Chemistry, University of Georgia, 1965.  
Doctor of Philosophy in Biochemistry, University of Tennessee, Medical Unit 1971.  
Postdoctoral Research Fellow, University of Texas Medical Branch, 1970-1973.

### 3. Nuclear Experience

Mr. Harrison has 15 months power reactor experience, including initial startup and power ascension testing at Hatch Nuclear Plant, Unit 1. As Plant Chemist and Assistant Laboratory Supervisor, his responsibilities were development and implementation of the station chemical control program, supervision of chemical control program, supervision of chemical and radiochemical laboratory operation, inservice training of laboratory technicians and supervision of the Radiation Protection Program. As Assistant Chemistry Radiation Protection Engineer at Crystal River, Unit 3, he accrued 45 months of power reactor experience, including startup testing, power ascension testing, station maintenance and refueling. Development of the station chemical control program has led to participation in multi-utility study programs for once-through steam cycles.

### 4. Other Experience

Mr. Harrison was an instructor of general chemistry, qualitative analysis, physical science, and general biology at Brewton-Parker College. He coordinated the evaluation of the physical plant for accreditation purposes.

## TECHNICAL QUALIFICATIONS

Mr. G. P. Hebb - Nuclear Shift Supervisor

1. Job Responsibilities

Responsible to the Operations Superintendent to plan, supervise and coordinate the duties and training of operating personnel assigned to his shift. Serves in an advisory consulting capacity as regards to plant operations. Is responsible for all operating activities and is the sole authority at the plant when immediate supervisors are not present.

2. Education

High School Graduate, Robert E. Lee High School, Jacksonville, Florida - 1962.

Various electronics courses - 1962 - 1970.

One semester of Engineering, New York Institute of Technology - 1975.

3. Nuclear Training

One year of nuclear power plant training and operating as a Lead Reactor Operator at various U.S. Naval facilities - 1964 - 1970.

Two years construction, testing, startup and operation at a large BWR.

Reactor Operator's Training Program - CR-3.

4. Summary

Mr. Hebb started in the Production Department with Florida Power Corporation as an Assistant Nuclear Operator at the Crystal River Nuclear Plant in 1973. He progressed through the operating classifications during the construction and testing of this facility and was promoted to Assistant Nuclear Shift Supervisor in 1977, having acquired a "Cold" Senior Reactor Operator's License. He was subsequently promoted to Nuclear Shift Supervisor in 1979 and has accumulated a total of 15 years of related nuclear power plant experience encompassing a wide range of reactor situations.

## TECHNICAL QUALIFICATIONS

Maurice F. Hebb - Vice President-Staff

1. Job Responsibilities

The primary function of this position is to assist the President and senior officers by performing staff and administrative duties of the President's office. Mr. Hebb handles special projects, corporate-wide, serves on task forces, coordinates work between staff members, responds to letters that do not need the President's signature, represents the President at various functions, prepares and keeps account of the President's RA Budget and analyzes monthly RA reports directed to the President, approves work orders, expense accounts and various forms for the President, prepares reports and develops data as requested.

2. Education

B.E.E. - University of Florida, Gainesville, Florida, 1951.

3. Nuclear Training

Nuclear Operations Short Course for Utility Management (B&W).

4. Nuclear Experience

None

5. Summary

Mr. Maurice F. Hebb, Vice President-Staff, began employment with Florida Power Corporation in 1948 as a Co-op student. Upon graduation from college in 1951, he became a full-time employee as an Associate Engineer in Operating Construction and Maintenance. Between 1951 and 1967, Mr. Hebb held various engineering and management positions. He was promoted to Vice President in 1967 and currently serves on the President's staff.

Mr. Hebb is a Registered Professional Engineer in the State of Florida. He has held offices in various professional activities such as Chairman of the Technical Advisory Committee on Power Supply for the Federal Power Commission and served on the Governor's Fuel Allocation and Conservation Council in 1974-75.

ANCLOTE PLANT

NAME Robert C. Hedlund

TITLE Instrument & Controls Supervisor

EDUCATION High School GED  
College 2 Yr GED  
Numerous Tech Schools

TECHNICAL EXPERIENCE (MAN-YEARS)

a. ENGINEERING

(1) ENGINEERING MANAGEMENT

(2) TOTAL UTILITY EXPERIENCE

22 Years

b. FIELD

(1) ELECTRICAL ENGINEERING

(2) MECHANICAL ENGINEERING

(3) MECHANICAL MAINTENANCE

(4) ELECTRICAL MAINTENANCE

(5) INSTRUMENT & CONTROL MTCE.

(6) CHEMISTRY

(7) POWER PLANT OPERATIONS

F

N

7

7

22

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(RCH)D69

456 094

## TECHNICAL QUALIFICATIONS

Mr. Philip C. Henry - Director, Transmission &  
Substation Projects

### 1. Job Responsibilities

Direct the company's transmission and substation construction program from the conception stage through completion. This includes responsibility for engineering, construction, right-of-way selection and acquisition, site selection and acquisition, licensing, materials, outside contracting, cost control and project scheduling.

### 2. Education

Bachelor of Science in Electrical Engineering - University of Missouri, 1959.

Masters in Engineering - University of South Florida - 1968.

### 3. Nuclear Training

Completed the Radiological Monitoring Instructor Training Course administered by the State of Florida Civil Defense Agency and Florida Institute for Continuing University Studies - November 1964.

Completed the Industrial Defense and Disaster Planning Course for Privately Owned and Privately Operated Facilities, administered by the U.S. Army at Ft. Gordon, GA. - April 1965.

Completed the Management of Radiation Accidents Course conducted by the Division of Radiological Health, Department of Health Education and Welfare - March 1965.

Completed a training course in Nuclear Power Plant Operation, given on the Combustion Engineering Plant simulator, September 1974.

### 4. Nuclear Experience

1972 - 1976 - Served as Director of System Construction, with responsibility for the management of the Crystal River #3 nuclear plant construction.

### 5. Summary

Mr. P. C. Henry, Director, Transmission & Substation Projects, began employment with Florida Power Corporation on January 14, 1963. Prior to this, and since graduating from college, worked for Union Electric Co., Arkansas/Missouri Power Co., and A. B. Chance Co. Mr. Henry is a member of the IEEE and is a Registered Professional Engineer in the State of Florida.

## TECHNICAL QUALIFICATIONS

Mr. M. C. Henson - Microfiche Operator  
Computer Services Division

1. Job Responsibilities

Coordinates and distributes microfiche to different areas of the company. Previously was Computer Operator from November 1975 until June 1979.

2. Education

High School Diploma, Bethel High School, Colquitt, Georgia - 1960

3. Nuclear Training

Nuclear plant training program in Chemistry, Radiochemistry and Health Physics conducted October 24 through December 9, 1977 at the Applied Physical Technology, Inc. and the Georgia Technical Research Center.

CR-3 - two weeks training was held on-site December 10 through December 24, 1977, learning NRC regulations, chemical measuring safety and health monitoring.

## TECHNICAL QUALIFICATIONS

Mr. Russell A. Herring - Engineering Technician  
Transmission Engineering

Emergency Operations Personnel  
Crystal River Nuclear Plant (CR-3)

### 1. Job Responsibilities

Emergency Operations Personnel is a position used only in the case of a Bargaining Unit Walk-out at Florida Power Corporation's Crystal River Nuclear Plant. The position utilizes the knowledge of Chemistry, Radiochemistry, Health Physics, Counting Room Technology, Surveillance and Radiological Procedures, and Nuclear Regulatory Commission Rules and Regulations, Part 50.

### 2. Education

High School Diploma received in 1973 from Dixie Hollins High School, St. Petersburg, Florida, with general education and honors in Chemistry and English.

### 3. Nuclear Training

Successfully completed a Nuclear Plant Training Program at Georgia Institute of Technology from October through December 1977. This program involved detailed study in Chemistry, Radiochemistry, Health Physics, Counting Room Technology, and Nuclear Rules and Regulations, Part 50.

Received on-the-job training at the Florida Power Corp. Crystal River Nuclear Plant (CR-3) in December 1977 while assigned to Surveillance and Radiological Procedures and Safety and Health at the Plant.

### 4. Nuclear Experience

1977 - Experience in working around the reactor while attending the Nuclear Plant Training Program being held at Georgia Institute of Technology.

1977 - Experience in running procedures during operation while attending the Nuclear Plant Training Program being held at Georgia Institute of Technology.

1977 - Experience in working around the reactor and running procedures during operation at Florida Power Corporation's Crystal River Nuclear Plant (CR-3).

## TECHNICAL QUALIFICATIONS

Mr. J. Christopher Hicks - Supervisor Quality Programs  
Quality Programs Department

### 1. Job Responsibilities

The function of this position is to provide the Company with assurance, through the Quality Programs, that regulatory requirements and Company Quality Policies are fulfilled. The position also provides FPC with an internal source for comprehensive expertise in metallurgy, welding and non-destructive testing, and fulfills the regulatory requirements for the Company to have a nondestructive testing Level III Examiner.

### Education

Bachelor of Science in Metallurgy, Case Institute of Technology, Cleveland, Ohio - 1964.

Industrial Radiography, Picker X-Ray (80 hours)

Ultrasonic I & II, ASNT Cleveland Chapter (60 hours)

Fundamental of Welding Engineering, Ohio State University (40 hours)

Welding of Nickel and Nickel Alloys, International Nickel (40 hours)

Principles of Management Units I & II, Wittenberg University  
(100 hours)

QA Training, G.E. Nuclear Engineering Services (8 hours)

Corrosion, American Society for Metals (40 hours)

Management by Objectives, In-Plant TV Course, WVIZ-TV (20 hours)

Supervision of the Disadvantaged, In-Plant TV Course, WVIZ-TV  
(10 hours)

Management for Supervisors, FPC Course (48 hours)

Effective Listening, FPC Course (4 hours)

Fracture Mechanics of Engineering Materials, American Society for  
Metals (40 hours)

Stress Corrosion Failures, ASM Symposium (24 hours)



3. Experience

Details of Work at FLORIDA POWER CORPORATION:

Five and one-half years have been spent in the Quality Programs Department. Activities and responsibilities of this position included:

Auditing Florida Power and contractor construction activities for conformance to codes and specifications.

Performing vendor quality program evaluations.

Testing and certifying Level I and Level II test personnel for Florida Power Corporation.

Reviewing welding and nondestructive testing procedures of vendors and contractors for conformance to codes and specifications.

Providing metallurgical expertise regarding material selection, fabrication, testing and failure analysis.

Training personnel in code requirements for welding and nondestructive qualifications.

Reviewing construction, testing and operations procedures for conformance to the Corporate Quality Program.

Details of Work at A.G. McKEE AND COMPANY:

Twenty-two (22) months were spent as Staff Welding and Fabrication Engineer. The majority of the work was for the Petroleum and Chemicals Division, but also provided technical consultation to the Iron and Steel Division.

Activities and responsibilities of this position included:

Specifying materials, fabrication procedures and NDE examinations for pressure vessels, heat exchangers and rotating equipment for use under stated conditions of pressure, temperature or corrosivity.

Reviewing and approving vendor welding, fabrication, and nondestructive examination processes, for compliance with specifications.

Developing field welding procedures and specifying their qualification.

Mr. J. Christopher Hicks (Cont'd)

Assisting inspectors with interpretation of applicable fabrication and test specifications.

Representing McKee in welding, materials and fabrication areas with both vendors and clients.

Analyzing field failures for cause and recommending corrective actions.

Advising vendors having fabrication difficulties, on possible corrective actions.

Details of Work at the PFAULDER COMPANY

Twenty-nine (29) months were spent as Plant Metallurgist and understudy to the Welding Engineer. In January, 1970 received promotion to Plant Welding Engineer reporting to the Manufacturing Superintendent, and held position for seventeen (17) months.

Activities and responsibilities of these positions included:

Developing and monitoring shop welding and related fabrication procedures.

Testing and training welders to ASME Code, Section IX.

Establishing and supervising radiographic inspection program to requirements of ASME Code Section VIII, including interpretation of radiographs.

Training radiographic personnel.

Developing ultrasonic test procedures and training operators.

Providing technical support for shop personnel on NDE requirements.

Determining cause of failures and developing corrective actions.

Supervising alloy fabrication and metal finishing during regular foreman's absence.

Advising Product Engineering of fabrication and inspection requirements for new designs.

Serving as consultant to Estimating concerning fabrication requirements.

Specifying welding consumables and equipment for purchase and providing Management with cost justification.

Mr. J. Christopher Hicks (Cont'd)

4. Affiliations

Mr. Hicks is a full member of:

American Welding Society (AWS)

American Society for Metals (ASM)

American Society for Nondestructive Testing (ASNT)

5. Certifications

Mr. Hicks has the following certifications:

Registered Professional Engineer (Quality), State of California.

NDE Level III Examiner, ASNT written exams in RT, UT, PT.

## TECHNICAL QUALIFICATIONS

Mr. Michael E. Higgins - Technical Services Superintendent  
P. L. Bartow Plant

1. Job Responsibilities

The primary functions of this position are to direct the operation of the plant chemical department through the plant chemical engineer, accomplish or coordinate all performance testing of equipment, coordinate all capital projects, and monitor all environmental affairs for the site.

2. Education

Bachelor of Mechanical Engineering, Cooperative Division, Georgia Institute of Technology - 1973.

3. Summary

Mr. Michael E. Higgins began working for Florida Power Corporation upon graduation in 1973 from Georgia Institute of Technology. His experience with the company has been as Performance Engineer, Plant Performance Section; Combustion Turbine Engineer, DeBary Plant; Results Engineer, Bartow Plant; and, presently, as Technical Services Superintendent, Bartow Plant.

## TECHNICAL QUALIFICATIONS

Mr. Andrew H. Hines, Jr. - President and Chief Executive Officer

1. Job Responsibilities

Chief Executive Officer for the corporation.

2. Education

B.S. in Mechanical Engineering, University of Florida, Gainesville, Florida, 1947.

3. Nuclear Training

Nuclear Operations Short Course for Utility Management (B&W).

4. Nuclear Experience

None.

5. Summary

Mr. Hines, President and Chief Executive Officer, began work for Florida Power Corporation in 1951 as an Assistant Production Engineer. Prior to this Mr. Hines began his career with General Electric Company in 1947 in Research and Development and worked in combustion research, gas turbine development and steam turbine engineering, as well as locomotive control systems and mechanical designs. At Florida Power he also served as Industrial Sales and Area Development Department head and was assigned responsibilities in Division Operations in 1961. Mr. Hines was promoted to Vice President in 1964 and Executive Vice President in 1967. In 1968 he was elected to the Board of Directors and in 1972 promoted to President. He was made Chief Executives Officer in 1973.

Mr. Hines is a registered Profesional Engineer, a member of the American Society of Mechanical Engineers and was made a Fellow in ASME in 1977. He is a former Senior Member of the Florida Engineering Society and a former member of the Florida Nuclear and Space Commission. Mr. Hines has served as Vice Chairman of the National Electric Reliability Council and is a past Chairman of the Southeastern Electric Reliability Council.

## TECHNICAL QUALIFICATIONS

Mr. James C. Hobbs, Jr. - Project Engineering Manager  
Crystal River Units 4 and 5 Project

Chairman, Nuclear General Review Committee  
Crystal River Unit 3

### 1. Position Responsibilities

Management and control of project engineering activities. Assist and support the project manager in total project management. Coordinate engineering with all other project functions. Duties include: (1) Provide management direction and supervision for all project engineering activities. Plan, schedule and execute engineering activities of FPC and consultants to meet overall project cost and schedule requirements; (2) Direct studies, evaluations and selections for plant equipment and systems; (3) Direct the preparation of engineering input for project regulatory activities; (4) Direct departmental technical, contractual and administrative functions to assure coordination with all other project activities.

#### Nuclear Safety

Direct activities of FPC Corporate Nuclear General Review Committee as Chairman in accordance with Technical Specification 6.5.2 and the NGRC Charter.

### 2. Education

- a. BEE - Bachelor of Electrical Engineering, University of Florida, 1963.
- b. BNES - Bachelor of Nuclear Engineering Sciences with High Honors, University of Florida, 1968.

### 3. Nuclear Training

- a. Babcock & Wilcox Nuclear Training Short Course - Six (6) day condensed nuclear power plant course for FPC executives, managers and engineers.
- b. University of Florida Nuclear Engineering Degree Program - Numerous courses requiring operation of nuclear related equipment. Training with and operation of the University of Florida Training Reactor (UFTR).
- c. Nuclear Engineering Training - Instructed under-graduate Introduction to Nuclear Engineering Course for FPC engineers and supervisors. Fifteen (15) weeks comprehensive nuclear engineering course.

ETibbs (T.SpecJCH)Di

- d. Florida Power Corporation Nuclear Training Program for Crystal River Unit 3 - Instructed basic electrical theory and nuclear instrumentation section of nuclear academic training course for CR-3 plant staff, engineers, supervisors, and operators.

4. Nuclear Experience

General Nuclear Engineering Corporation 1963-1964. Florida Power Corporation 1964 - Present:

a. Engineering

1963 - 1964. Staff Engineer with General Nuclear Engineering Corporation, Dunedin, Florida. Design engineering on prototype fuel elements for the Advanced Bonus Core to the BONUS reactor for this nuclear research and development firm. Responsible for design, installation and operation of certain laboratory tests. Preparation of technical reports to the Atomic Energy Commission covering this work.

1964 - 1965. Electrical Engineer with FPC writing and reviewing specifications, evaluation of bids, and general electrical design engineering for Crystal River Unit 1.

b. Construction

1966 - 1974. Electrical Construction Supervisor for Crystal River Units 1 & 2. Superintendent - Mechanical and Electrical Systems in the Generation Construction Department of FPC for CR-3, responsible for management and direction of all mechanical and electrical construction activities of the CR-3 Project. This includes all contractor functions, project administrative and management duties, and coordination with all other project functions.

c. Testing

1974 - 1977. Managed and directed Crystal River Unit 3 Testing and Startup as Manager - Generation Testing. This included the conceptual test planning, the initial development of testing performance and testing quality control programs, the preparation of test procedures, test specifications, test execution and results, and the administrative and quality control responsibility of the complete test and startup program. Duties included: (1) Management of testing contractors and construction contractors effort within the testing program, and assist in project management and planning for total project; (2) Numerous project supervisory and administrative duties, including preparation of testing budget and schedules, personnel and contract administration and implementation of general FPC project

policies and procedures; (3) Direct the activities of FPC testing supervisory personnel and contractors technical and administrative support personnel; (4) Direct plant testing and startup activities for all components, structures and systems through 100% full-power testing. Coordinate Testing with plant Construction and Operations; (5) Direct the testing quality control program in compliance with NRC and FPC overall quality program requirements.

d. Safety

1973 - Present. Member of FPC Corporate independent review and audit committee (ANSI-18.7); Nuclear General Review Committee (NGRC). Directed NGRC activities as Chairman, 1978 to present.

5. Summary

Mr. Hobbs has held positions responsible for major activities on the Crystal River Unit 3 project from inception to present.

Mr. Hobbs is a Registered Professional Engineer in the State of Florida and is a member of Tau Beta Pi and the American Nuclear Society.

Mr. Hobbs is Chairman of the FPC Nuclear General Review Committee, Technical Specification 6.5.2.



## TECHNICAL QUALIFICATIONS

Mr. Orville H. Hockett, Jr. - Production Engineering, Civil/Structural Engineer, Fossil Engineering

1. Job Responsibilities

Lead departmental Civil/Structural Engineer provides concurrent multi-project engineering for new construction, facility expansion, improvements and alternate modes of operation for fossil and gas turbine generating units. Provides technical expertise and assistance to more junior grade discipline engineers and other discipline engineers.

2. Education

BCE, University of Florida - 1958.

3. Nuclear Training

None

4. Nuclear Experience

None

5. Other Experience

One year structural design of interstate highway and railroad bridges with private consultant.

One and one-half years manager of branch offices for consulting, testing and inspection engineering and land surveying firm.

Two years City Engineer and Director of Public Works, City of Pinellas Park, Fl.

One year self-employed, consulting engineering and land surveying.

Seventeen (17) years with Florida Power Corporation as follows:

Eleven years structural design of overhead electric transmission lines, towers and foundations and supervision of surveying, mapping and drafting activities.

Two years civil and structural design of all phases of electric transmission and distribution substations.

Four years civil/structural engineering in various phases of fossil and gas turbine generating units.

Registered Professional Engineer and Registered Land Surveyor, State of Florida.

## TECHNICAL QUALIFICATIONS

Mr. J. Edgar Holt - Electrical and Controls Engineer  
Bartow Plant

1. Job Responsibilities

To primary functions of this position are to provide technical support and direction in the electrical and controls area of power plant operation, and to establish maintenance procedures for two shops.

2. Education

Bachelor of Science in Electrical Engineering, Mississippi State University, Starkville, Mississippi - 1974.

3. Nuclear Training

None

4. Nuclear Experience

None

5. Summary

1974 - 1978 - Westinghouse Electric Corporation, Tampa Division.  
Nuclear steam generators and pressurizers are the primary products of that division.

November 1978 - Present - P. L. Bartow Plant, Florida Power Corporation

ANCLOTE PLANT

NAME C. O. Horton

TITLE Operations Superintendent

EDUCATION High School (12 Grade)

TECHNICAL EXPERIENCE (MAN-YEARS)

a. ENGINEERING

(1) ENGINEERING MANAGEMENT

(2) TOTAL UTILITY EXPERIENCE

28 Years

b. FIELD

(1) ELECTRICAL ENGINEERING

(2) MECHANICAL ENGINEERING

(3) MECHANICAL MAINTENANCE

(4) ELECTRICAL MAINTENANCE

(5) INSTRUMENT & CONTROL MTCE.

(6) CHEMISTRY

(7) POWER PLANT OPERATIONS

F

N

28

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(COH)D69

## TECHNICAL QUALIFICATIONS

Mr. F. O. Hudson - Supervisor, Disbursements Services  
Payroll & Disbursements Accounting

1. Job Responsibilities

Plan, develop, implement and direct the Company's Disbursements Services Program.

2. Education

High School, 1 year Junior College, Night and Correspondence Courses in Accounting.

3. Experience (all with Florida Power Corporation)

2 years - Fixed Capital Accounting

10 years - Stores Accounting

9 years - Accountant in Accounts Payable

13 years - Supervisor, Accounts Payable

1 year - Supervisor, Disbursements Services

## TECHNICAL QUALIFICATIONS

Mr. Charles E. Jackson - Construction Manager  
Combustion Turbine Projects

### 1. Job Responsibilities

Plan, schedule and manage the construction activities for the Company's combustion turbine power plant projects, and other assigned construction projects.

### 2. Education

Bachelor of Mechanical Engineering, University of Florida - 1958.

### 3. Nuclear Training

B&W Training Course, 1 week - 1967.  
Classes at plant site during construction.

### 4. Nuclear Experience

March 1958 - November 1962 - Mechanical Project Engineer,  
E. I. DuPont, Aiken, South Carolina. Responsible for design,  
fabrication, installation and testing of equipment and facilities to  
handle radioactive materials at the Savannah River Laboratory and  
other Savannah River areas.

March 1971 - May 1977 - Construction Superintendent - CR #3, Crystal  
River Site, Crystal River, Florida. Plan, schedule and direct the  
on-site construction activities to construct Crystal River Unit 3  
Nuclear Power Plant.

### 5. Summary

Began employment with Florida Power on Crystal River Unit #1 and  
carried out following assignments prior to becoming Construction  
Superintendent on Unit 3:

Mechanical Construction Supervisor - CR #1:

<u>Assignments</u>	Crystal River Unit 1, 400 MW Coal - Commercial 1966
	Crystal River Unit 2, 500 MW Coal - Commercial 1969
	Converted Unit 1 to Oil - Completed 1970

Responsibilities Plan, schedule, coordinate and direct all  
construction work required for the installation, startup and testing  
of the mechanical equipment and systems at Crystal River Units 1 & 2  
and subsequent oil conversion of Crystal River Unit 1.

## TECHNICAL QUALIFICATIONS

Mr. S. W. Johnson, II - Nuclear Maintenance Staff Engineer

1. Job Responsibilities

The Nuclear Maintenance Staff Engineer is responsible to the Nuclear Maintenance Superintendent for monitoring and insuring that all maintenance work complies with applicable regulations. He oversees work execution and serves in place of the Maintenance Superintendent for assigned time, staff and administrative duties. He is responsible for development of the Maintenance Department's training programs, projects and outside contractors.

2. Education

Bachelor of Mechanical Engineering, Auburn University - 1971.

3. Nuclear Training

Reactor Operators Training Program conducted by Florida Power Corporation Training Personnel, 8 hrs/day, 14 weeks, including two weeks simulator training at Babcock & Wilcox, Lynchburg, Virginia. Licensed as Reactor Operator, Crystal River Unit #3 (OP-4905).

4. Nuclear Experience

He has a total of four (4) years nuclear experience including engineering, quality, construction, startup and testing, operations and safety.

5. Summary

Mr. S. W. Johnson, II, Nuclear Maintenance Staff Engineer graduated from Auburn University in 1971 with a Bachelor of Mechanical Engineering degree. While attending this University, he was a co-op student for seven work quarters at Alabama Power Company's Gorgas Steam Plants. There he performed duties in all areas of plant operation. Upon graduation from college, he served in the Production Department of Florida Power Corporation. Beginning as an Associate Engineer with the boiler maintenance section, he transferred to the Environmental Test Section performing stack emission testing. In 1973, he advanced to Plant Engineer at Crystal River Unit 1 & 2 Fossil Units. There his responsibilities included unit performance, improvement projects, operations, and maintenance.

From March to July of 1975, he was a Field Engineer and supervisor with a labor contractor finishing composite craft labor to a utility. In August 1975, Mr. Johnson rejoined FPC as a Plant Engineer at Crystal River Unit 3. Since that time, he has had responsibilities in

5. Summary (Cont'd)

the plant computer maintenance both hardware and software, reactor coolant pump impeller replacement; seal package repair; control rod drive maintenance; reactor vessel internal removal and replacement; and pre-service inspection coordinator.

Mr. Johnson's primary responsibilities have been with the development of the Inservice Inspection Program at Crystal River Unit 3, including weld inspection, hydro examinations, eddy current inspection of the steam generators, pump and valve test program and hanger inspection. In development of our program, he gained extensive knowledge of codes and standards pertaining to nuclear plant design and operation.

Mr. Johnson is active in the current development of the ASME Section XI code, "Inservice of Nuclear Power Plant Components". He has served as a member of the subgroup on "Testing of Pumps and Valves" and task group on "Inspection of Class 2 Systems". Currently he is chairman of the working group on "Code Requirements and Inspector Duties" and member of the subgroup on "General Requirements".

## TECHNICAL QUALIFICATIONS

Mr. Charles J. Karrh - Production Engineering, Engineering Assistant

### 1. Job Responsibilities

An Engineering Assistant has the responsibility of providing technical engineering assistance to the Manager, Nuclear Engineering, and the engineering staff in support of the Production Engineering Department for the nuclear plant, Crystal River Unit #3; also obtain technical information concerning the nuclear plant, relative to engineering projects.

### 2. Education

1 year, University of Alabama (Engineering)  
1 year, Bible College  
3 quarters night classes, East Carolina University (Goldsboro Extension)  
1 year, Electronic Tech. School, U.S. Air Force

### 3. Nuclear Training

Completion of Florida Power Corporation Radiation Protection Course, FPC RP-101  
"Engineering Procedures" training course given by Production Engineering.

### 4. Nuclear Experience

J. A. Jones Construction: Engineering Aide, January, 1975 - March, 1977. Reported to the Mechanical Construction Supervisor at Crystal River, Unit #3 Nuclear Plant.

Joseph Salem & Associates Inc.: Field Engineer, April, 1977 - June, 1978, stationed at Florida Power Corp., General Office Complex, assigned to support of Production Engineering projects at Crystal River Unit #3, Nuclear Plant.

Florida Power Corporation: Engineering Assistant, June, 1978 - Present. Reporting to Manager, Nuclear Engineering, supporting his activities, and providing technical assistance for the Engineering Staff at Crystal River Unit #3 Nuclear Plant.

### 5. Other Experience

U. S. Air Force, three (3) years maintenance of electronic countermeasures equipment.

2-1/2 years with Florida Power Corporation, in various areas of expediting, purchasing, and receiving of materials for Crystal River Unit #3 Nuclear Plant.

E.Tibbs (T.SpecCJK)D69



## TECHNICAL QUALIFICATIONS

Mr. Arnold A. Katterhenry - Member, NGRC (Offsite Review Group)

1. Job Responsibilities

Review operation of CR-3 as assigned by NGRC Chairman.

2. Education

B.S., Electrical Engineering, University of Florida, Gainesville, Florida - 1958.

M.S., Nuclear Engineering, University of Florida, Gainesville, Florida - 1960

3. Nuclear Training

Successfully completed study/training for Senior Reactor Operator's License, including brief operational assignments at Oak Ridge National Laboratory and Dresden Unit 1.

4. Nuclear Experience

1960 - 1962 - Participant in the design of a BWR in the area of reactor thermal-hydraulics.

1962 - 1963 - Prepared test and operating procedures for a BWR and prepared for SRO licensing.

1963 - 1965 - Was licensed as SRO and acted as Shift Engineer during BWR precritical testing, startup and power operation.

1965 - 1967 - Utility Nuclear Planning Engineer, evaluating reactor designs for utility application.

1967 - Present - Nuclear Consultant working primarily in safety analysis, environmental analysis, nuclear plant design and operation, and licensing.

5. Summary

Mr. Arnold Katterhenry is employed by NUS Corporation and is a member of the CR-3 NGRC (Offsite Review Group) under contract with Florida Power Corporation. In addition to his NGRC assignment, he has been responsible for other work on CR-3 including fire protection review and analyses required by Appendix I to 10CFR50. He has been responsible for a variety of safety analyses and design reviews for numerous other plants.

ETibbs(Katterhenry)D81

## TECHNICAL QUALIFICATIONS

Mr. Larry C. Kelley - Quality Engineer  
CR-4 & 5 Project

### 1. Job Responsibilities

To assure materials and activities associated with all phases of Crystal River 4/5 Project are consistent with project and corporate objectives. This is done thru the review of equipment specifications and proposals, performance of vendor audits, evaluations of vendor QA/QC plans, monitoring on-site contractor QC programs, identifying equipment and program deficiencies and tracking corrective action.

### 2. Education

Associate of Science (pre-engineering), F.J.C., Jacksonville, Fl.

### 3. Nuclear Training

Naval Machinist Mate School: The curriculum consisted of nomenclature, operation and maintenance of steam turbines, generators, pumps, valves, condensers, heat exchangers, evaporators, air compressors, pressure reducers and boilers - 3 months.

Naval Submarine School: Trained in electrical electronic and mechanical systems associated with naval nuclear submarines. S.S.W. - 2 months.

Basic Naval Nuclear Power School - Mathematics, heat transfer, reactor physics, metalurgy, etc - 6 months.

Naval Nuclear Power School Prototype - Nomenclature, operation and maintenance of electrical, electronic and mechanical systems associated with a destroyer nuclear power plant. D.I.G.

Air Conditioning and Refrigeration School - 2 months.

Lathe School - 2 weeks. He was ship's machinist for approximately 18 months.

Lithium Bromide School - 2 weeks.

Sound Analysis School- vibration monitoring - 2 weeks.

Basic 200 hour Florida State Firefighters Courses, Florida State Fire College. He was Acting Fire Chief for CR-3 during part of 1977.

Reactor Operators Training Course, Crystal River Unit 3 - approximately 6 months. Obtained R.O. License.

Mr. Larry C. Kelley (Cont'd)

3. Nuclear Training (Cont'd)

Various short courses in welding defects identification, metal fabrication defects and NDE methods.

4. Nuclear Experience

1964 - 1974 - Ten years in the Naval Nuclear Power Program included schools, sea duty and shore duty rotation.

1976 - 1978 - Two years at Crystal River Unit 3 Nuclear Plant as a Compliance Auditor, Assistant Fire Brigade Chief and occasionally working with plant engineers and operations.

1978 - Present - Consultant to the Audit Review Sub-Committee of the Nuclear General Review Committee.

5. Summary

Mr. Larry C. Kelley, Quality Engineer, began his nuclear training when he was accepted into the Naval Nuclear Program in 1964. He attended numerous naval schools associated with the nuclear program. He operated and maintained a prototype destroyer power plant and spent 4 years training on, operating and maintaining an S.S.W. nuclear power plant including associated auxiliary equipment. He spent approximately 18 months in Charleston Naval Shipyard during submarine overhaul. He participated in extensive mechanical, electrical and physics testing programs associated with overhaul and startup of a nuclear power plant.

Upon employment with Florida Power Corporation, Mr. Kelley worked with Quality Assurance methods, programs and procedures as a Compliance Auditor. Mr. Kelley attended the State Fire College, taking the basic state firefighter's course set up by the state. He modified this curriculum to apply specifically to CR-3 Nuclear Plant and used it to train approximately 60 members of CR-3 Fire Brigade.

He attended approximately 6 months of reactor operator training at CR-3 and obtained an R.O. License.

Mr. Kelly was promoted to quality Engineer, CR 4/5 Project, where he was assigned to assist with the review of quality program audits for the Audit Review Sub-Committee of the NGRC as a collateral duty.

## TECHNICAL QUALIFICATIONS

Mr. W. E. Kemper - Nuclear Technical Specification Coordinator

### 1. Job Responsibilities

The Nuclear Technical Specification Coordinator is responsible to the Technical Support Engineer for the implementation, administration, maintenance and supervision of the Technical Specification Surveillance Program which ensures adherence to all NRC licensing commitments. He is responsible for ensuring all procedures and modifications to the nuclear plant are evaluated from a reactor safety aspect (10 CFR 50.59 Review) to ascertain continued safe operations of the facility. Additionally, he evaluates equipment installed, delivered or purchased for the nuclear plant which is defective or deviates from its technical requirements to determine if a nuclear safety hazard exists or a 10 CFR 21 report is required.

He is responsible for ensuring any licensing violations are identified, reported to the NRC and corrective action is initiated to prevent recurrence. He is responsible for coordinating the Surveillance Program with the ASME Section XI Inservice Inspection Program. His responsibilities also involves various research and development projects as required by NRC response bulletins, changes to technical specifications and plant operational or engineering problems. He is also responsible for maintaining a high degree of expertise in the area of reactor safeguards, requirements of technical specifications and reportability requirements pursuant to the Code of Federal Regulations and NRC Regulatory Guides and advising the Nuclear Plant Manager relative to these areas.

### 2. Education

Mr. Kemper graduated from High School in 1966. He has obtained approximately two years of college accreditation (52 semester hours) through night courses attended at Central Florida and Pasco-Hernando Community Colleges and is currently pursuing a B.S. degree in Engineering.

### 3. Nuclear Training

Mr. Kemper has completed 52 weeks of nuclear power training with the U.S. Navy which consists of 26 weeks classroom training and 26 weeks operational training.

He has also completed the Cold License Training Program which includes 26 weeks of classroom training and Phase 1, 2, 3, 4, 5 and 6 as stated in Section 12.2.

4. Nuclear Experience

Mr. Kemper has a total of 12 years of nuclear experience including Operational and Maintenance Supervision and Engineering, Startup and Testing, Design Supervision, and Practical Operational Experience.

5. Summary

Mr. Kemper, Nuclear Technical Specification Coordinator, began employment with Florida Power Corporation on October 1, 1973 as an Assistant Nuclear Operator at Crystal River Unit #3. His duties in this capacity included procedural development, operator training, initial plant startup, hot functional testing, and plant operation. He was promoted to the position of Assistant Nuclear Shift Supervisor on October 25, 1977 where he assisted in the supervision of the nuclear plant operation. On January 15, 1979, he was promoted to the position of Nuclear Technical Specification Coordinator.

Prior to his employment with Florida Power Corporation, he spent six years in the U.S. Navy Nuclear Power Program which consisted primarily with the maintenance and operation of various nuclear powered facilities.

Mr. Kemper has successfully completed his operator Cold Licensing exam and on April 2, 1976 was awarded a Senior Operator's License which he is still maintaining.

## TECHNCAL QUALIFICATIONS

Mr. James G. Keppeler - Production Engineering, Project Engineer,  
Fossil Engineering

### 1. Job Responsibilities

The primary responsibilities of a Project Engineer in the Fossil Engineering Section are to provide engineering services (responsible for drawings, specifications, diagrams, reports, studies, etc.) and procurement (bid evaluations, purchase order and contract initiation, review, etc.) for Fossil Plant maintenance, operations, and capital improvement projects.

### 2. Education

BSME - Syracuse University, 1971

### 3. Nuclear Training

None

### 4. Nuclear Experience

None

### 5. Other Experience

New York State Electric and Gas Corporation:

February, 1971 - February, 1974, Plant Engineer. Responsible to Plant Manager for resolution of specific power plant problems, training of mechanical maintenance personnel, supervision of fuel and ash handling crews and specific construction supervision. Also responsible for plant steam and water chemistry and instrument calibration. (2 coal fired steam - electric generating stations).

February, 1974 - June, 1976, Mechanical Engineer. Administrative and engineering responsibilities associated with the design of an 850 MW coal fired steam - electric generating unit. Reported to Project Manager.

June, 1976 - September, 1977, Staff Engineer. Responsible for supervision of corporate results group which conducted testing and studies related to power plant thermodynamic performance. Reported to Supervisor, Fossil Operations and Maintenance.

Florida Power Corporation: Project Engineer. September, 1977 - Present. Responsibilities detailed in Item 1. Report to Manager Fossil Engineering.

Registered Profesional Engineer in States of New York and Florida

ETlibbs (JGK)D83

456 120

## TECHNICAL QUALIFICATIONS

Mr. W. R. Klein - Fuel Engineer

### 1. Job Responsibilities

The Fuel Engineer performs contract administration and management for fossil and nuclear supply and fuel related contracts. He prepares various fossil and nuclear fuel requirements and cost forecasts. He prepares technical and economic studies and makes recommendations concerning all phases of the Fuel Department.

### 2. Education

- A. Bachelor of Electrical Engineering, Georgia Institute of Technology - 1965.
- B. Master of Science in Nuclear Engineering, Georgia Institute of Technology - 1967.

### 3. Nuclear Training

- A. AMU-ANL Summer Engineering Practice School (3 mo.) Argonne National Laboratory - 1966.
- B. Nuclear Fuel Management (3 weeks) Purdue University - 1968.
- C. Protection System Reliability Analysis (1 week) - NUS Corp. - 1969.
- D. Nuclear Power Plant Operations (1 week) Babcock & Wilcox - 1976.
- E. Nuclear Plant Training Program in Chemistry/Radiochemistry/Health Physics/Counting Room Technology (6 weeks) Applied Physical Technology.

### 4. Nuclear Experience

He has had a total of 11 years of nuclear experience, including engineering design, licensing, testing, health physics, and national standards committees.

### 5. Summary

He worked as a technician in nuclear applications and health physics at Aberdeen Proving Ground, 1963 to 1964.

He made the physics calculations, developed a fuel management scheme, and made some of the accident dose calculations to convert the Georgia Tech Research Reactor from 1 MW to 5 MW, 1966.



5. Summary (Continued)

He worked as an Engineer for Baltimore Gas and Electric from 1968 to 1972. He coordinated engineering on the radiation monitoring system, nuclear instrumentation, and closed circuit television system. He developed Calvert Cliffs security program and worked on the specifications for the equipment required. He assisted with the design of the control boards and fuel contract negotiations.

He worked as a Principal Engineer for Babcock & Wilcox NPGD from 1972 to 1974. He worked on Reactor Protection Systems and Engineered Safeguards Systems. He wrote the control and instrumentation portion of several PSARs, FSARs, and reactor proposals. He designed a system to mitigate the consequences of anticipated transient without scram. He developed a failed fuel detection system.

He transferred to Babcock & Wilcox NMD in 1975. He wrote the process control, quality control, accountability, and safeguards criteria for the design of a mixed  $UO_2$  and  $PuO_2$  fuel fabrication plant. He also assisted with the environmental impact statement on the existing  $PuO_2$  facilities.

He worked as a Reactor Engineer, Computer and Controls Engineer and Results Engineer for Florida Power Corporation from 1975 to 1979. He was responsible for monitoring and evaluating the day-to-day operation of the Reactor. He developed procedures and tests relating to the Reactor during operation and refueling. He developed several computer programs to monitor reactor operation and performance. These programs were used to determine when the poison rod failed and moved out of the reactor core and the location of an unlatched control rod.



## TECHNICAL QUALIFICATIONS

Mr. J. R. Kraiker - Shift Supervisor

1. Job Responsibilities

Responsible to the Operations Supervisor to plan, supervise and coordinate the duties and training of operating personnel assigned to his shift. Serves in an advisory consulting capacity as regards to plant operations. Is responsible for all operating activities and is the sole authority at the plant when immediate supervisors are not present.

2. Education

High School Graduate

3. Nuclear Training

He has had a total of 65 weeks (1.3 years) of classroom training including Phase 1, 2, 3, 4, 5, and 6 as stated in the FSAR Section 12.2, as well as the 40 hours of classroom training for requalifications every two (2) years have been to simulator training for one (1) week. Received 56 hours of classroom training dealing with the TMI incident.

4. Nuclear Experience

He has had a total of 8.5 years of nuclear experience including engineering and design supervision, startup, testing and practical operating experience.

5. Summary

Mr. Kraiker started in the Production Department of Florida Power Corporation in August 1958 as Plant Helper at Bayboro Plant and progressed through the operating classifications there and at Bartow Power Plant to Switchboard Operator at Bayboro Plant. Mr. Kraiker transferred to Crystal River Unit #3 as a Control Center Operator in January 1971. He was promoted to Chief Nuclear Operator September 24, 1973. He received his "Cold" Reactor Operator's License August 25, 1976. On September 26, 1979, Mr. Kraiker was promoted to Assistant Shift Supervisor. On July 25, 1979, he received his Senior Reactor Operator's License and was promoted to Nuclear Shift Supervisor on July 31, 1978.

Mr. Kraiker has 21 years of power plant experience. He has been involved with initial core loading and the first refueling at CR-3. Mr. Kraiker was the Shift Chief Operator at the time of initial criticality and has been involved with many critical approaches since.

## TECHNICAL QUALIFICATIONS

Mr. John Kulik - Production Engineering, Engineer II, Fossil Engineering

1. Job Responsibilities

Provide engineering and design services for electrical projects associated with fossil fuel generating plants.

2. Education

BSEE, Drexel Institute of Technology - 1951.

3. Nuclear Training

Attended lectures on FPC Quality Assurance Program including review of 10 CFR 50 Appendix B.

4. Nuclear Experience

None

5. Other Experience

April 1978 - Present - Engineer II, Florida Power Corporation.  
Electrical engineering projects involving steam power plants and gas turbine peaking units.

November 1976 - April 1978 - Engineer, Joseph Salem & Associates, Inc.  
Provided electrical engineering services to various sites of steam power generating plants and gas turbine peaking units of Florida Power Corp.

October 1974 - November 1976 - Electrical Engineer and Designer, Tampa Bay Engineering and Colvin Engineering Corp. Provided electrical engineering and design services on industrial and commercial projects.

More than 10 years Sales Engineering and 12 years of supervisory experience in a steel producing plant.

## TECHNICAL QUALIFICATIONS

Mr. Donald J. LaBorde - Production Engineering, Project Engineer  
Combustion Turbine Projects

1. Job Responsibilities

Temporarily assigned, for an indefinite time period, to provide Instrumentation and Control experience to the Nuclear Engineering Group. This includes evaluating requests for engineering, writing engineering studies, and issuing construction work packages.

2. Education

BSEE - University of Alabama, 1972

3. Nuclear Training

"Fundamentals of Non-Destructive Testing" course given by Florida Power Corporation from August, 1976 to October, 1976.

4. Nuclear Experience

None

5. Other Experience

Seven (7) years experience in the design of Control Systems for fossil-fired steam generating units and combustion turbines.

## TECHNICAL QUALIFICATIONS

Mr. Arthur B. Leigh - Manager of Production Maintenance Services

### 1. Job Responsibilities

The position is responsible for directing all Production Maintenance Services staff activities and project activities. The section furnishes to the plants engineering, expertise, manpower, tools, etc. for plant overhauls and problems. The plants could not be expected to supply these services themselves.

### 2. Education

Bachelor's Degree in Mechanical Engineering, University of Rhode Island, 1953.

### 3. Nuclear Training

- A. 1972 - Nuclear Familiarization (B&W).
- B. 1972 - Principals of Nuclear Engineering
- C. 1972 - Production Managers Nuclear Training (FPC).
- D. 1972 - Core Analysis.
- E. 1972 - Reactor Safety (NUS).
- F. 1972 - Management of Radiation Accidents (FDWAP).
- G. 1972 - Computer Functions
- H. 1972 - Introduction to Nuclear Power (NUS).
  - (a) Reactor Physics
  - (b) Reactor Performance
  - (c) Radiation Protection and Chemistry
- I. 1972 - Design Training
- J. 1973 - Technical "Specs"
- K. 1973 - Familiarization of Crystal River Unit #3 Controls.
- L. 1973 - Training on Systems.  
Factory Familiarization.

4. Summary

Mr. Leigh worked for Westinghouse Electric Corporation from 1952-1962. Prior to joining Florida Power Corporation, he was assigned to the Philadelphia, Pennsylvania District Office as a Service Engineer. His duties were to supervise the erection, repair, and trouble shooting of major manufacturing equipment made by Westinghouse, including steam turbines, and generators.

Mr. Leigh has had 27 years experience in various phases of electric utility industry, including 17 years directly related with plants. He has been a member of the American Society of Mechanical Engineers for 20 years and is a Registered Professional Engineer in the State of Florida.

## TECHNCAL QUALIFICATIONS

Mr. H. B. Lucas - Administrative Supervisor

### 1. Job Responsibilities

Direct activities of the Office Manager to provide general administrative services, quality related document control and retention, and microfilming of data generated during the life of the plant. These activities must comply with Company policies, Regulatory Guides, and NRC requirements and are controlled by written work procedures.

Direct activities of the Officer of the Guard to assure implementation of the plant security program wahich must comply with NRC Regulatory Codes, Standards and Guides. This is accomplished by administering the site security plan and its implementing procedures.

Direct activities of the Building Service Supervisor who supervises decontamination of radiological spills, drumming of radioactive waste, laundry of contaminated clothing, building and grounds janitorial services and/or maintenance, and supports other plant sections with personnel, supplies and mobile equipment.

Direct activities of the Nuclear Training Supervisor who develops and implements training programs for the plant staff including initial training and retraining of licensed Nuclear Reactor Operators as required by 10 CFR55, Appendix A.

### 2. Education

Associate in Arts Degree - St. Petersburg Junior College

### 3. Non-Nuclear Training

May 1965 - January 1967 - 87 Weeks

Temporary employee as an Engineering Aide in the Transmission Design Section. Resigned to resume college studies.

August 1967 - December 1969 - 123 Weeks

Rehired as permanent employee - Engineering Aide

December 1969 - October 1972 - 149 Weeks

Engineering Technician with Transmission Design

November 1972 - October 1974 - 101 Weeks

Engineering Assistant with Transmission Design

Total Non-Nuclear Experience 460 Weeks or 8.85 Years

4. Nuclear Experience

September 1959 - August 1963 - 204 Weeks  
Nuclear Weapons Mechanic - U. S. Air Force

October 1974 - June 1976 - 87 Weeks  
Compliance Auditor - Crystal River Unit #3

June 1976 - Present  
Administrative Supervisor - Crystal River Unit #3

5. Summary

Mr. H. B. Lucas graduated from St. Petersburg Senior High School in 1959 and entered the U.S. Air Force as a Nuclear Weapons Mechanic that same year. He attended St. Petersburg Junior College upon discharge and earned an AA Degree in December 1971. He was employed by Florida Power Corporation in May 1965 and has progressed through various stages of responsibility until 1976 when he was selected as the Administrative Supervisor. Since then he has been involved in directing, staffing, organizing and planning the Administrative Section of the Nuclear Plant.

## TECHNICAL QUALIFICATIONS

Mr. T. C. Lutkehaus - Technical Support Engineer

### 1. Job Responsibilities

The Technical Support Engineer is responsible to the Technical Services Superintendent for supervision and direction of the Inservice Inspection Engineer, Technical Specification Coordinator, and 8 Plant Engineers. This section performs central engineering support for specialized projects. The planning, scheduling, and performance of the plant's ISI program is included as a responsibility of the ISI Engineer. Assurance of compliance with the technical specifications, evaluation of nonconforming operation reports, and evaluation of safety impact of MAR's and procedural changes are included as a responsibility of the Technical Specification Coordinator. The Technical Support Engineer is a member and trains, evaluates and directs the plant Fire Brigade. He maintains an internal training program for all plant engineers. He also must maintain a backup SRO license.

He is responsible for directing the section and maintaining compliance with codes, regulatory guides, technical specifications, plant quality programs and FSAR, and responding to NRC, Insurance and internal audits by same.

### 2. Education

Bachelor of Science in Electrical Engineering, University of Florida - 1969.

### 3. Nuclear Training

He has a total of 52 weeks (1 year) of classroom training, including Phase 1, 2, 3, 4, 6 and 7 as stated in Section 12.2 of FSAR.

### 4. Nuclear Experience

He has a total of 8.8 years of nuclear experience. He has held the position of Maintenance Engineer for 7.5 years, responsible for mechanical and electrical maintenance and Technical Support Engineer for 1.3 years, responsible for Inservice Inspection, Technical Specification Coordination and Central Engineering Support.

### 5. Summary

Mr. T. C. Lutkehaus, Technical Support Engineer, graduated from the University of Florida in 1969 with a Bachelor of Science in Electrical Engineering. Prior to his attending the University, he held responsible positions in the U.S. Navy, an air conditioning and

ETibbs(T.SpecTCL)D4



5. Summary (Cont'd)

refrigeration company, and an instrument and control manufacturing corporation. Since his graduation from college, he has served in the Production Department of Florida Power Corporation. Beginning with Associate Engineer in the Plant Performance Section, he advanced to Test Engineer and finally to his present position on the staff of Crystal River Unit #3. He was active in performance testing of all plants on our system, as well as instrument and control modifications on same. He participated actively in the startup testing of Crystal River Unit #2 which is a fossil fuel 527 MW plant.

He has held the position of Maintenance Engineer, responsible for mechanical & electrical maintenance. He participated in startup and testing of CR #3. He has held the temporary position of Outage Planning Coordinator and Outage Manager for our first fueling outage.

He has 18.3 years of responsible power plant or applicable industrial experience, 8.8 years of which are nuclear power plant experience.

## TECHNICAL QUALIFICATIONS

Mr. Paul F. McKee - Technical Services Superintendent

### 1. Job Responsibilities

To direct the Technical Services Department consisting of the Performance Engineering group, Technical Support group, Compliance group, and Chemistry and Radiation Protection group. To direct daily analysis of plant nuclear and thermal performance and to act on identified unfavorable efficiency trends or equipment problems. To direct the coordination of refueling, operating, and testing activities with the goal of shortening outages and improving manpower efficiency. To direct and coordinate equipment modifications and capitalized equipment installation by developing schedules, securing contracts, budgeting monies, and coordinating engineering activities. To manage the plant program to ensure Quality Compliance, its proper documentation, and reporting as required by state and federal agencies. To direct the chemistry and radiation protection programs to protect plant equipment from undue corrosive environments and to control personnel exposure. To chair the Plant Review Committee (PRC) to assure that the plant is operated and maintained in a safe manner through review of all procedures, plant modifications, nonconforming operations and safety related equipment clearances.

### 2. Education

- A. Bachelor of Mechanical Engineering, University of Florida - 1964.
- B. Bachelor of Nuclear Engineering Sciences, University of Florida - 1969.
- C. Three years majoring in college math and physics, Hobart College - 1959-1962.

### 3. Nuclear Training

He has had a total of 90 weeks (1.7 years) of classroom training, including Phase 1, 2, 3, 4, 5 and 6 as stated in Section 12.2.

### 4. Nuclear Experience

15 years of responsible power plant experience of which 7-1/2 years are nuclear experience including system design review, design management, startup testing, and practical operating experience.

5. Licenses

Senior Reactor Operator (SRO) license.  
SOP 2652-1, April 1973

6. Summary

Mr. Paul F. McKee, Technical Services Superintendent, graduated from the University of Florida in 1964 with a Bachelor of Mechanical Engineering Degree and in 1969 with a Bachelor of Nuclear Engineering Sciences Degree. Since January, 1965, he has served in the Production Department of Florida Power Corporation, starting with the position of Associate Engineer-Results, Engineer-Results, Plant Engineer, Operations Engineer, and was promoted to Assistant Plant Superintendent in April, 1974. He has had extensive experience in the area of plant performance, instrumentation and controls, equipment, performance, operation and maintenance, and supervision of personnel. He was active in the startup testing activities of the Florida Power Corporation's fossil unit, Crystal River No. 1 (360 Mwe). In his position of Plant Engineer at the Turner Plant, he was responsible for the maintenance and operation of a four unit plant with a capacity of 216 Mwe.

In early 1978, the plant management staff was reorganized. Mr. McKee was named at that time to the newly created position of Technical Services Superintendent.

## TECHNICAL QUALIFICATIONS

Mr. Robert L. McLaughlin - Project Scheduling Analyst

1. Job Responsibilities

To develop, implement and maintain licensing, engineering, procurement, construction and startup schedules for the Projects Department.

2. Education

Bachelor of Science in Physics, Florida Presbyterian College (now Eckerd College) St. Petersburg, Florida 1971.

3. Nuclear Training

No formal nuclear training.

4. Nuclear Experience

(General) November 1972 to May 1973 - Florida Power Corporation, Crystal River Unit 3 Nuclear Station.

(Specific) November 1972 to August 1973 - Writing and reviewing pre-operational test procedures in accordance with NRC, FSAR, TECH. SPEC., R. O. and similar requirements.

August 1973 to September 1975 - Responsible for development and maintenance of test and startup schedule, including both large scale and detailed CPM charts and computer program. Prepared NRC monthly report (yellow book).

September 1975 to December 1976 - Review Engineer and Coordinator for Test Results Review Program including deficiency resolution and retest requirements.

December 1976 to May 1977 - Responsible for computerized Mast : Punchlist tracking all remaining work items.

May 1977 to May 1978 - Directed modifications to Master Punchlist Program for use as 1) Outage Punchlist tracking outage-related work activities, 2) MAR Punchlist tracking plant modifications status, and 3) Procurement Requisition Punchlist tracking outstanding P.R. and work order status.

Developed outage planning and coordination methods as part of Crystal River 3 outage planning group. Occasional duty as Mechanical Supervisor and Electrical Supervisor as required.

## TECHNICAL QUALIFICATIONS

Mr. J. E. Mack, Jr. - Inservice Inspection Engineer

1. Job Responsibilities

The principle purpose of the Inservice Inspection Engineer is the planning, coordination, scheduling, and supervision of all testings and examinations required by the Code of Federal Regulations in the ASME Section XI Code, "Rules for Inservice Inspection of Nuclear Power Plant Components". These tests and examinations include the pumps, valves, pressure, leak rate, component supports, core support, containment, replacement parts, repairs, additions, modifications, steam generators and pressure retaining components in class 1, 2, and 3 systems.

2. Education

Bachelor of Science in Civil Engineering, University of Florida - 1973.

3. Nuclear Training

He has had a total of 4 weeks (0.08 years) of classroom training including primary plant maintenance and welding requirements per ASME Code Section IX.

4. Nuclear Experience

He has had a total of 4.7 years nuclear experience including the supervision of plant maintenance activities, and planning & scheduling of plant outages.

5. Summary

Mr. J. E. Mack, Jr., Inservice Inspection Engineer, graduated from the University of Florida in 1973 with a Bachelor of Science in Civil Engineering. Following graduation, he joined Florida Power Corporation on April 2, 1973 as an engineer in the System Engineering Department. In this position, he specified and designed foundations for high voltage transmission structures. On October 23, 1974, Mr. Mack was temporarily assigned to the Production Department at CR #3. While at the Crystal River Nuclear Plant, he assisted the Maintenance Engineer by maintaining the spare parts program prior to plant startup, supervising the repairs of "A" reactor coolant pump and the dome of the reactor containment building, and the reviewing and writing of plant maintenance procedures. In October of 1976, Mr. Mack was permanently assigned to Crystal River Unit #3 as a Plant Engineer to supervise the on-site maintenance contractor in the performance of

ETibbs(T.SpecJEM)D4

Mr. J. E. Mack, Jr. (Cont'd)

5. Summary (Cont'd)

plant modifications and day-to-day maintenance support. He was promoted to Maintenance Engineer in May of 1978. While the Maintenance Engineer, he was assigned to supervise the planning efforts for forced plant outages and coordination of refueling activities for the plants first refueling outage. In May of 1978, Mr. Mack was promoted to his present position as Inservice Inspection Engineer.

## TECHNICAL QUALIFICATIONS

Mr. John V. Maloney - Director, Purchasing and Stores

1. Job Responsibilities

To assure the Company a supply of needed materials and services, in a timely manner, with optimum inventory levels at the lowest possible cost.

2. Education

Bachelor of Science in Mechanical Engineering, University of Notre Dame, Notre Dame, Indiana. Master of Business Administration, American International College, Springfield, Massachusetts.

3. Nuclear Training

None

4. Nuclear Experience

None

5. Summary

Previously employed by Combustion Engineering in areas of contract administration and contract estimating. Employed by Florida Power Corporation in August, 1971 as Manager of Cost Control pertaining to Generation Projects, named Purchasing Manager in April, 1974 and named Director, Purchasing and Stores in April, 1977

## TECHNICAL QUALIFICATIONS

Mr. Ben J. Marshall - Electrical Construction Superintendent  
Generation Projects, CR 4 & 5.

### 1. Job Responsibilities

Direct and supervise the planning and organization of all procedures and personnel for the total electrical installation of a large generating facility. Supervise and direct all activities for all electrical contractors necessary for a successful and expeditious installation, coordinating with all other Project Managers, other FPC departments and other contractors.

### 2. Education

Bachelor of Science Degree in Electrical Engineering, University of Florida, Gainesville, Florida - 1953.  
Registered Professional Engineer in the State of Florida - 1964.

### 3. Nuclear Training

Attended a college level Company sponsored course in Nuclear Physics equivalent of three hour college courses.  
Attended a Company sponsored course for Production Staff Engineers and Supervisors on the design, operation and maintenance of Crystal River #3.

### 4. Nuclear Experience

None

### 5. Previous Positions Held Within the Company

Plant Electrician  
Electrical Construction Supervisor - Plant Construction  
Electrical Engineer - Plant Design  
Assistant Production Superintendent - Production Department  
Superintendent of Maintenance - Production Department  
Manager, Production Projects - Production Department

Present position - Superintendent of Electrical Construction -  
Generation Projects.

### 6. Summary

Mr. Ben J. Marshall began employment with Florida Power Corporation in April, 1941. He spent six years as a Plant Electrician in a operating power plant. He obtained three years' leave of absence during World War II and served as an Airplane Pilot in the Air Force. He obtained leave of absence for three years in 1950 to attend the University of Florida obtaining his Degree in Electrical Engineering. After graduation he returned to Florida Power Corporation as Electrical Supervisor of the Electrical installation on new plant construction.



Ben J. Marshall (Cont'd)

In 1958 he was promoted to Electrical Engineer in charge of Electrical Design of Fossil Power Plants. In 1965 he was promoted to Assistant Production Superintendent in the Production Department. As such he supervised all of the Staff Engineers on the Production Staff and the System Maintenance Crew. He was responsible for staff functions such as the budget, planning, supervision of projects, maintenance from a system standpoint, training and capital improvements.

His other positions that he served in the Production Department included Superintendent of Maintenance, in charge of all maintenance activities for the Production Department. He also organized the new department of Production Projects and was in charge of the installation phase of all new capital projects going into existing plants.

In December, 1978 he was transferred to Crystal River #4 in charge of Electrical Construction for a large coal fired generating unit.

## TECHNICAL QUALIFICATIONS

Mr. Fred N. Megahan - Production Chemical Engineer

1. Job Responsibilities

The major function of this position is to provide the professional technical ability needed by the Production Department for solving chemical engineering problems related to power production, corrosion control, fuel analysis, air and water pollution prevention.

2. Education

Bachelor of Arts, Chemistry, Temple University, 1950.

3. Nuclear Training

1968 - Fundamental of Nuclear Power  
20 session course - Stoller Associates and Drexel University

4. Nuclear Experience

May, 1973 - June, 1978. Chief Chemist, Electric Production Dept.  
Philadelphia Electric Company

May, 1962 - May, 1973. Assistant Chief Chemist  
Philadelphia Electric Company

5. Summary

For eleven years as Assistant Chief Chemist, Mr. Megahan supervised the central laboratory of Philadelphia Electric Company, and when promoted to Chief Chemist was responsible for fuel treatment, water treatment, and waste disposal in eight fossil plants. He participated in the design of water treatment facilities and water quality programs associated with Peach Bottom Units 2 & 3 (BWR's).

During operation of Peach Bottom, he provided staff assistance in water chemistry and served as an alternate member of the Operation and Safety Review Committee.

Professional Society Memberships include the American Chemical Society, the American Society for Metals and the National Association of Corrosion Engineers.

He is the representative from Florida Power Corporation on the EEI Power Station Chemistry Subcommittee and the ASME Research Committee on Water in the Thermal Power Systems.

ANCLOTE PLANT

NAME Melanie S. Adams-Miller

TITLE Anclore Chemist

EDUCATION B. A. Chemistry

TECHNICAL EXPERIENCE (MAN-YEARS)

- a. ENGINEERING
  - (1) ENGINEERING MANAGEMENT
  - (2) TOTAL UTILITY EXPERIENCE
- b. FIELD
  - (1) ELECTRICAL ENGINEERING
  - (2) MECHANICAL ENGINEERING
  - (3) MECHANICAL MAINTENANCE
  - (4) ELECTRICAL MAINTENANCE
  - (5) INSTRUMENT & CONTROL MTCE.
  - (6) CHEMISTRY
  - (7) POWER PLANT OPERATIONS

F

N

5

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

## TECHNICAL QUALIFICATIONS

Mr. T. A. Miller - Training Specialist

### 1. Job Responsibilities

The Training Specialist is required to develop, schedule, coordinate or instruct Hot License Training Program, Senior Reactor Operator Upgrade Training Program, Requalification Program for Senior and Reactor Operators, Fire Brigade Training and Retraining Program, and other training programs as required.

### 2. Education/Nuclear Training

Ft. Pierce High School, Ft. Pierce, Florida

Naval Electronics Technician School, Waukegan, Illinois, basic and advanced electronics - 1960-1961.

Naval Nuclear Power School, New London, Connecticut (6 months) - 1961. Courses in mathematics, classical and nuclear physics, engineering materials, thermodynamics, reactor theory, power plant principles and specialized electronic equipment.

Advanced Naval Nuclear Power School, Windsor, Connecticut (6 months) - 1961-1962. Courses in reactor control, reactor principles and operation of nuclear power plants. Licensed as Reactor Operator and qualified as Reactor Control Supervisor.

Firefighting School, Orlando, Florida (5 weeks) - 1978. Courses on fundamentals of firefighting.

### 3. Nuclear Experience

May 1978 to Present - FPC Training Specialist.

September 1977 - May 1978 - FPC Assistant Shift Supervisor. Responsible to the Shift Supervisor for proper supervision of the operating shift and safe operation of the power plant. Obtained Senior Operator's License.

October 1973 - September 1977 - FPC Assistant Nuclear Operator. Obtained Reactor Operator's License. Responsible for operation of plant under direction of Shift Supervisor.

January 1960 - September 1973 - U.S. Naval Nuclear Power Program. Instructor/Operator U.S. Naval Nuclear Power Training Unit, Windsor, Connecticut. Responsible for operation of a pressurized water reactor plant as licensed operator and license training of students.

Mr. T. A. Miller (Cont'd)

Reactor Control Division Electronic Technician and Senior Reactor Operator - Westinghouse. Pressurized water reactor - USS DACE SSN 607, Pascagoula, Mississippi. Responsible for maintenance of reactor control electrical and electronic equipment and for operation of the nuclear power plant.

Instructor - U.S. Naval Nuclear Power School, Vallejo, California. Six month training course designed to prepare the student to operate a nuclear power plant.

Supervisor Reactor Control Division and Senior Reactor Operator - USS G.C. Marshall SSBN 654.

Responsible for supervision of Reactor Operators and supervising maintenance of equipment associated with Reactor Control.

Supervisor Reactor Control Division and Senior Reactor Operator. USS Archerfish SSN 678. Responsible for Hot Functional Testing, flushes, hydro testing of reactor systems during construction of Westinghouse pressurized water reactor. Calibration and testing of Reactor Control Instrumentation.

## TECHNICAL QUALIFICATIONS

Mr. Roberto Montemayor - Operations Superintendent  
Production, Suwannee Plant

### 1. Job Responsibilities

Direct the operation of all plant equipment in a safe, reliable and economical manner. Evaluate plant operating data to assure operating permits are complied with, including reporting violations. Direct the training of operating personnel. Evaluate trouble reports for proper priorities. Exercise immediate and decisive action during emergencies and initiate necessary corrective action.

### 2. Education

31 accredited semester hours - College Sciences, Electrical Engineering, St. Petersburg Junior College, St. Petersburg, Florida - 1961-1965.

### 3. Nuclear Training

He has been trained in an NRC-approved training program which utilizes a complete and accurate nuclear power plant simulator required for examination by the NRC for Senior Reactor Operator's License - 1968-1973.

He has received classroom training beginning with nuclear preparatory training (1968-1969) through systems training (1972-1973, FPC & B&W) to, but not including, simulated cold licensing exams for SRO at CR #3 (1973, NUS).

He received Nuclear Facility Training at the North Carolina State University Pool Reactor (1970) and non-documented observation training at the Connecticut Yankee Plant (1971), which included hands-on refueling operations and Health Physics and Radiation Protection.

### 4. Nuclear Experience

1970 - Qualified as a Pool Reactor Operator on the North Carolina State University Pool Reactor.

1971 - Non-documented operating experience at the Connecticut Yankee Plant PWR including refueling operations and extensive experience in Health Physics and Radiation Protection.

1969 - 1973 - Performed and supervised engineering design functions as they related to construction and operations of the FPC Crystal River #3 project, including development and writing of technical specifications, as well as operating, testing and surveillance procedures.

ETibbs(Montemayor)D81

5. Summary

Mr. Roberto Montemayor joined Florida Power Corporation on January 5, 1953, after having served a 41 month tour of duty in the U.S. Air Force. His service has been with the Production Department of FPC. Beginning with the classification of Plant Helper and progressing through the operating classifications, including 11 years as a Shift Supervisor, he was promoted to Operations Superintendent to the Suwannee Plant on July 1, 1977.

He has extensive experience in power plant operations and personnel supervision. He is highly knowledgeable in the areas of plant performance, instrumentation and controls, equipment performance, and maintenance.

His skills and broad knowledge in plant operations and supervision have been acquired in five of eight FPC steam generating plants. He was an active pioneer operator in pre-operational testing and startup activities at Avon Park #2 (40 MW), Paul L. Bartow #2 (121 MW), and Paul L. Bartow #3 (240 MW).

Concurrent with the Paul L. Bartow plant service, 1961-1966, he attended evening classes at the St. Petersburg Junior College and successfully completed 31 accredited semester hours on the sciences of Electrical Engineering.

After having been assigned to the Crystal River site as Shift Supervisor on January 31, 1966, he was responsible for the training and supervision of operating personnel in the Company's first coal-fired unit (400 MW). He served in this capacity thru operational testing and startup activities of the second coal-fired Unit #2 (520 MW).

On September 1, 1969, he was appointed to the Nuclear Staff as a Shift Supervisor of the Company's first nuclear plant, where he acquired his nuclear training and experience in academics, facility systems, design, engineering and supervision.

Since becoming a Shift Supervisor, he has been a participant in various courses geared to the development of better managers and trainers. In applicability, he has been instrumental in the development and implementation of personnel training programs, plant personnel qualifications guides, safety and security plans, plant technical specifications, design, operating, testing and surveillance procedures, etc.

## TECHNICAL QUALIFICATIONS

Mr. George C. Moore - Assistant Vice President  
Power Production

### 1. Job Responsibilities

Manage the operation, maintenance and support of all Florida Power Corporation power generation facilities in a safe, economical, reliable and efficient manner to meet the company's power and regulatory requirements. These facilities consist of: 1484 MW of net peaking and mid-range generation; 2714 MW of net fossil generation and 855 MW of nuclear generation. Mr. Moore manages the engineering and design services, including studies, analyses, and specifications, as necessary, to accomplish capital improvement projects for all existing generating facilities.

Mr. Moore is directly in charge of the Power Production Department which has approximately 933 regular employees.

### 2. Education

Bachelor Degree in Industrial Engineering, Georgia Institute of Technology - 1957.

Master of Engineering Degree, University of South Florida - 1970.

Registered Professional Engineer - State of Florida, No. 8076.

### 3. Nuclear Training

Nuclear Engineering Indoctrination Course (33 hrs.), FPC and Babcock & Wilcox - 1967.

Twenty-six week Nuclear Engineering Course, FPC and University of Florida - 1968.

Will receive first week of a four-week specialized B&W nuclear training program the week of July 23, 1979 in Lynchburg, Virginia.

### 4. Nuclear Experience

None

### 5. Summary

Mr. George C. Moore, Assistant Vice President, Power Production, began employment with Florida Power Corporation on June 24, 1957 as an Associate Engineer in the Production Department. From 1957 to 1969 he held the positions of Assistant Electrical Engineer and Electrical Engineer, and it was during this period that Mr. Moore received



Mr. George C. Moore (Cont'd)

extensive experience in the field of electrical plant operations. In August of 1979, Mr. Moore was promoted to System Operations Engineer and was involved in the control, loading and economical operation of FPC's generating units. In December, 1969, he was promoted to Corporate System Analyst where he was involved with the development, operation and maintenance of the Corporate Model. In March 1971, Mr. Moore became the Manager of Economic Research and in May of 1971 was promoted to Director of Computer Services. For six years Mr. Moore worked in this capacity until his promotion to Director of Corporate Planning in February of 1977. He became Assistant Vice President, Corporate Planning in March of 1979 and was then promoted to his present position of Assistant Vice President, Power Production, in April, 1979.

## TECHNICAL QUALIFICATIONS

Mr. Edward M. Morea - Production Engineering, Engineer II  
Fossil Engineering

1. Job Responsibilities

Perform detailed engineering for the solution of problems associated with mechanical systems in existing fossil-fired power plants and peaking units.

2. Education

BSME, University of Florida - 1973

3. Nuclear Training

Seismic Support Criteria for 2" and Under Piping , Gilbert Associates, Inc., Crystal River #3 Nuclear Plant - December 1976.

4. Nuclear Experience

January 1974 - June 1977 - Engineer, Florida Power Corporation.  
Involved in mechanical design and procurement for Crystal River Nuclear Unit #3.

5. Other Experience

Six (6) months experience with Florida Power Corporation supervising mechanical construction activities at a fossil-fired power plant.

Registered Professional Engineer in the State of Florida

## TECHNICAL QUALIFICATIONS

Mr. Albert W. Morneault - Supervisor, Surveillance Affairs, Environmental & Licensing Affairs Department

1. Job Responsibilities

The primary functions of this position are to develop, implement and operate surveillance, monitoring and environmental programs associated with the construction and operation of power plants.

2. Education

Bachelor of Science in Electrical Engineering, University of Florida, March, 1970.

3. Non-Nuclear Training

Ambient Air Quality Monitoring System, EPA, November, 1978

Dredging Engineering Short Course, Texas A&M, November, 1977

Computer Time Sharing Operating Course, FPC, January, 1978

4. Summary

Began employment with Florida Power Corporation in April, 1967 as an Engineer in Training until receiving degree in March, 1970. Employed as Supervisor, Surveillance Affairs, since that time.

Achievements in this position include the successful development and supervision of the Oceanographic Data Acquisition System at the Crystal River Power Plant, and the Meteorological Monitoring System for Crystal River Nuclear Unit #3.

Florida Registered Professional Engineer, License No. 14054.

## TECHNICAL QUALIFICATIONS

Mr. Doyle A. Morrison, Jr. - Senior Quality Auditor,  
Quality Programs Department

### 1. Job Responsibilities

- a. Perform evaluations of vendors Quality Assurance Programs, inspections of vendors manufacturing facilities, surveillance of on-going maintenance and modifications at CR #3, and Quality Program Audits of FPC, nuclear steam system suppliers, consultants, architect-engineers and others.
- b. Participate in nuclear plant operations and operator requalification training program to maintain NRC Senior Reactor Operators License.

### 2. Education

- a. High school graduate.
- b. Navy Nuclear Power School.
- c. Navy Electronics School.
- d. FPC's Senior Reactor Operator Cold License Training (FSAR 12.0).

### 3. Nuclear Experience

Mr. Morrison has over 16 years experience in construction, operation, and maintenance of nuclear power systems with the major emphasis on reactor operation.

His work experiences have included:

Writing operational technical and test procedures.

All phases of the training conducted for FPC Operations personnel. This training includes pool reactor training, design training courses, B&W simulator training, NUS operators course and general physics licensing courses and participation in all site conducted training such as academic training, systems training, security training and radiological health physics courses.

Functional testing of plant systems, nuclear fuel receipt, fuel loading, initial criticality, start-up and physics testing, and power escalation.

Monitoring and controlling nuclear instrumentation systems, reactor protection systems, engineered safeguards systems, control rod drive systems, and the integrated control system which ties together controls for the reactor plant, the secondary plant, and the electrical distribution systems.

Operation and maintenance of all nuclear reactor controls and instrumentation aboard Navy submarines.

Auditing of all operational areas at the Crystal River Nuclear Plant and vendor evaluations for the Approved Bidders List for the Nuclear Plant.

Assisting the recovery effort at Three Mile Island. This consisted of twelve (12) days on-site during the first three weeks following the accident, writing abnormal and emergency procedures and providing technical assistance to the Met. Ed./GPU Staff.

Over eight (8) years with Florida Power Corporation which included six (6) years as a licensed operator at the Crystal River Nuclear Plant.

## TECHNICAL QUALIFICATIONS

Mr. Richard W. Neiser - Vice President and Assistant General Counsel

1. Job Responsibilities

The primary function of this position is to coordinate the activities of the Company's Legal Department in giving legal counsel to the management and various departments.

2. Education

Bachelor of Science, Centre College, Danville, Kentucky, 1960.  
J.D., Stetson College of Law, St. Petersburg, Florida, 1963.

3. Nuclear Training

None

4. Nuclear Experience

None

5. Summary

Mr. Neiser began employment with Florida Power Corporation in January, 1966. His responsibilities have included various types of litigation and contract negotiations. He assumed responsibility for the management of the Legal Department when he was elected a Vice President in September 1978.

ETibbs (T.SpecRWN)D69

## TECHNICAL QUALIFICATIONS

Mr. W. R. Nichols - Operations Superintendent

### 1. Job Responsibilities

Responsible to the Nuclear Plants Manager for the safe, continuous and efficient operations of the nuclear plant. Specific duties include supervision, coordination, scheduling, planning, and training of nuclear operational personnel. Special assignments are assisting with the refueling planning and operation, and advisor to special nuclear projects. His activities are to monitor and evaluate current plant performance and establish plant guidelines to comply with the NRC and State of Florida Regulations. He maintains departmental records and verifies current procedures and modifications complying with the standards of ANSI 18.7. He is on call and develops good inter-departmental relations to insure organizational flexibility.

### 2. Education

High School Graduate - 1947

One year Pre-engineering Study - Orlando Junior College - 1954

18 Months Electrical Engineering - Virginia Polytechnic Institute - 1956

### 3. Nuclear Training

He has completed classroom and/or simulator training as required for cold license examinations at three (3) Nuclear Power Generation Stations.

### 4. Nuclear Experience

He has a total of 19 years of nuclear experience including design review, testing, startup, health physics and practical operating experience.

### 5. Summary

Mr. W. R. Nichols started his careers in the nuclear field with the General Dynamics Electric Boat Division in 1959. He has attained extensive operational experience on five (5) different types of nuclear power plants including four (4) initial nuclear unit startups, post critical testing and full power operation. Technical writings include operation and testing procedures for Connecticut Yankee, Turkey Point 3 & 4, and St. Lucie Unit 1. and Crystal River Unit 3. He has held a Senior Operators License since 1966 and at the time of Crystal River Unit 3 first refueling will have had 18 years of responsible nuclear power plant operating experience. He has taken and passed an NRC examination for Senior Reactor Operator and has held License SOP-2795 since August 1976.

## TECHNICAL QUALIFICATIONS

Mr. Waino W. Nisula - Purchasing Agent  
Power Plant Materials

1. Job Responsibilities

The primary functions of this position are to supervise the procurement of materials and equipment for operating power plants, including coordination of FPC Engineering, Quality Programs Department, and plant staff, as may be necessary.

2. Education

Bachelor of Civil Engineering, University of Florida, Gainesville, Florida - 1967.

3. Nuclear Training

None

4. Nuclear Experience

1972 - 1977 - Project Structural Engineer responsible for coordination between architect-engineer and construction for Crystal River Unit No. 3 civil/structural work.

5. Summary

Mr. Waino W. Nisula, Purchasing Agent, began employment with Florida Power Corporation in December 1972 as a Project Engineer. Prior to this, he was Vice-President of a small aluminum manufacturing firm, Suburban Enclosures, Inc., Clearwater, Florida from June 1971 to December 1972. He worked as a bridge design engineer for W. K. Daugherty, Consulting Engineers, Lake City, Florida from December 1969 to June 1971. Prior to this and since college graduation, he worked for Florida Power Corporation as Associate Engineer and then Engineer in the Power/Generation Engineering Department.



## TECHNICAL QUALIFICATIONS

Mr. David C. Nusbickel, Jr. - Quality Engineer

### 1. Job Responsibilities

The function of this position is to assure Florida Power Corporation compliance with regulatory and company requirements relative to the operation of Crystal River Nuclear Plant. Some of the primary activities of this position include:

- A. Administering the schedule for evaluation and periodic reevaluation of safety-related material/equipment manufacturers and service contractors.
- B. Auditing internal activities and pursuing improvements in operational controls as indicated necessary.
- C. Reviewing individual procedures which implement the Corporate Quality Program and obtaining changes as needed to ensure effective compatibility with regulatory requirements and company commitments.
- D. Developing and implementing plans for determining supplier compliance with procurement technical and quality program requirements.
- E. Providing surveillance of internal and contracted safety-related activities to assess or upgrade conformance with applicable Corporate Quality Program requirements.
- F. Monitoring the safety-related activities of interfacing departments to propose and develop appropriate improvements in the effectiveness of operational controls.

### 2. Education

Bachelor of Science in Electrical Engineering, Clemson University - 1969.

Optical Engineering, Martin-Marietta Corp. 20 hours

Management Techniques, Westinghouse. 40 hours

Managing Management Time, Westinghouse. 15 hours

Principles & Tools of Management, Westinghouse. 15 hours

Public Presentations, Westinghouse. 32 hours

ETibbs(T.SpecDCN)D4

456 155

3. Nuclear Training

Lead Auditor Training, Florida Power Corp. 30 hours

Quality Assurance Requirements in Nuclear Power Plants, Technical Seminars, Inc. 32 hours.

4. Nuclear Experience

Mr. Nusbickel is a Quality Engineer in the Quality Programs Department. He has ten (10) years experience in quality control and quality assurance, nine of which were spent in the naval and commercial nuclear fields. His nuclear-related activities have included QA engineering, supplier auditing/surveillance, quality program development/auditing, trend analysis, material traceability, nonconformance control, records control, manufacturing process monitoring, visual/dimensional/nondestructive inspection, and personnel training. His assignments have required a working familiarity with 10CFR50 Appendix B, ANSI N45.2 (including daughter standards), ANSI N18.7, ASME Section III, QRC-82, MIL-Q-9858A and NAVSHIPS 250-1500-1.

5. Summary

February 1978 to Present - Quality Engineer, Florida Power Corporation. Responsible for assessing and assuring operating nuclear plant quality with special emphasis on spare part procurement controls.

November 1976 to February 1978 - Sr. Quality Engineer, Offshore Power Systems. Responsible for development of quality implementing procedures for the manufacture of standardized nuclear power plants; special emphasis on inspection planning, nonconformance control, and record management systems.

February 1974 to November 1976 - QA Section Manager, Westinghouse Plant Apparatus Division. Managed the surveillance of nuclear component suppliers to assure naval nuclear requirement compliance; developed and conducted equipment procurement training courses; responsible for nuclear instrumentation and control equipment, nuclear pumps, neutron and pressure detectors, pressurizer heaters, and cable assemblies.

May 1970 to February 1974 - Quality Control Engineer, Westinghouse Plant Apparatus Division. Responsible for auditing, surveillance and inspection of nuclear instrumentation, control rod drive mechanism, valve, and detector manufacturers to naval nuclear requirements; also developed a vendor rating system and government inspection plans.

Mr. David C. Nusbickel, Jr. (Cont'd)

5. Summary (Cont'd)

August 1969 to February 1970 - Associate Quality Test Engineer, Martin Marietta Corporation. Responsible for the preparation, review and qualification of space and defense missile test programs.

## TECHNICAL QUALIFICATIONS

Mr. W. S. O'Brien - Director, Environmental & Licensing Affairs

### 1. Job Responsibilities

This position directs the environmental research and review conducted by the Company for power plant related facilities and for certain classifications of transmission lines and directs the efforts for obtaining licenses, permits, and/or approvals from local, State and Federal regulatory agencies for the construction and operation of power plant related facilities. Specifically relating to Crystal River Unit #3, this position is responsible for:

- A. Active environmental research programs directly assessing the impact of Crystal River Unit 3.
- B. Licensing activities with all Federal (except NRC), State and Local agencies.

### 2. Education

Bachelor of Mechanical Engineering, University of Florida - 1963.

Bachelor of Nuclear Engineering Science, University of Florida - 1968.

### 3. Nuclear Training

B&W Nuclear Plant Indoctrination Course, 1 week, 8 hrs/day - 1968.  
Included study and review of all aspects of nuclear plant design and operation.

### 4. Nuclear Experience

#### A. Engineering

1963 - 1964 - Staff Engineer with General Nuclear Engineering Corporation of Dunedin, Florida, a nuclear research and development firm. Participated in the design, fabrication and operation of test facilities for reactor control systems and fuel assembly materials.

1967 - 1970 - Engineer and Project Engineer with Florida Power Corporation. Review of engineering design documents in the mechanical and nuclear disciplines and procurement of equipment for mechanical and nuclear systems. Preparation of engineering evaluation and design studies relating to nuclear projects.

Mr. W. G. O'Brien (Cont'd)

1970 - 1972 - Nuclear Project Coordinator with Florida Power Corporation. Coordination of engineering activities between Florida Power Corporation, Gilbert Associates, Inc. and Babcock & Wilcox Company.

B. Quality

1967 - 1970 - Reviewed design documents and equipment proposals for proper quality requirements.

C. Safety

1967 - 1972 - Preparation and/or review of various PSAR, FSAR and other licensing documents.

5. Other Experience

1964 - 1967 - Associate Engineer and Project Engineer with Florida Power Corporation. Preparation and review of engineering design documents in the mechanical discipline for conventional power plants and procurement of mechanical equipment. Preparation of engineering evaluations and design studies for conventional power plant projects.

## TECHNICAL QUALIFICATIONS

Mr. Richard G. Obmann

### 1. Job Responsibilities

PA II CSD; coordinate, maintain and influent all software in "Generation Project Information Service" (GPIS) computer system since July 1977.

### 2. Education

BS in Mathematics, University of Tampa - 1965.

Miscellaneous engineering and graduate level courses, University of South Florida.

### 3. Nuclear Training

Nuclear Plant Training Program in Chemistry/Radiochemistry/Health Physics/Counting Room Technology conducted October 24 through December 9, 1977 at the Applied Physical Technology, Inc. and the Georgia Tech Nuclear Research Center.

CR-3: Attended two week training seminar December 10-24, 1977. Introduction to NRC regulations; safety measures, operations, health monitoring, etc.

## TECHNICAL QUALIFICATIONS

Alfred J. Ormston - Vice President, Engineering & Construction

1. Job Responsibilities

This is a staff position giving support to the Sr. Vice President, Engineering & Construction, as directed, in his capacity of managing the Engineering & Construction Department; especially as related to power generation, plant operations and maintenance.

2. Education

Bachelor of Science in Mechanical Engineering - University of Florida, Gainesville, Florida, 1939.

3. Nuclear Training

In-house Nuclear Engineering Course - 1969.

Nuclear Operations Short Course for Utility Management (B&W - one week - 1972)

4. Nuclear Experience

None

5. Summary

Mr. Ormston started with Florida Power Corporation in 1939, with various successive power plant operating, maintenance, and design positions. He became Chief Mechanical Engineer in 1955, with responsibility for design and construction of all power generating facilities, thru 1964. He was elected Vice President Power in 1964, and thru 1973 had responsibility for all plant operations and fuel supply, as well as plant design and construction. From 1974 thru present, he has been Assistant to Senior Vice President and, at present is the Vice President, Engineering & Construction.

Mr. Ormston is a Registered Professional Engineer (Florida), a Fellow of Florida Engineering Society, and a member of the American Society of Mechanical Engineers and National Society of Professional Engineers.

## TECHNICAL QUALIFICATIONS

Mr. C. Pachos - Structural Construction Superintendent

1. Job Responsibilities

Management of civil, structural, and architectural construction activities on the Crystal River Plant Project.

2. Education

BCE - Bachelor Civil Engineering, New York University, 1953.

Naval Architecture Course - Drexel Institute, completed 1954.

Power Plant Design Course, ICS, completed 1962,

3. Professional Experience

1953-1955. Naval Architect, hnl-structural GS-5, GS-7, GS-9 Philadelphia Naval Shipyard. Design and preparation of working drawings for the construction modification and repair of Surface and Submarine vessels.

1955 - 1957. Engineer, I, II, III Catalytic Construction Co., Philadelphia, Pa. Design Engineering in reinforced concrete and steel structures for oil and ore refineries, chemical, and heavy industrial projects.

1957 - 1964. Bechtel Corporation: Field Engineer, Job Engineer, Senior Field Engineer on:

FP&L - Fort Lauderdale, Fla. Units 4 & 5

FP&L - Port Everglades, Fla. Units 1 & 2

Delaware Power & Light Newcastle #3

Firestone - Akron, Ohio 2 Units

Orange Rockland - New York Unit #3 (started)

1964 - 1966. Florida Power Corporation - Construction Structural Supervisor Crystal River Unit #1.

1966 - 1968. Wellman & Lord (then Subsidiary of Bechtel Corp.) Senior Engineer. Heavy Industrial, and Nuclear Power Plant Design Engineering.

1968 - to Present: Structural Construction Superintendent Florida Power Corp. Crystal River Plant Unit 2 (Coal) Units 1 & 2 (oil conversion) Unit 3, Unit Train Coal Facility, Units 4 & 5.



C. Pachos (Cont'd)

4. Nuclear Experience

Turkey Point 3 & 4. Designed the precast support system which became integral with the roof slabs of the auxiliary building. Designed the CPM Construction Schedule for Auxiliary Building Construction and Equipment Erection.

Unit #3, Crystal River Plant. Responsible for construction of all Civil, Structural and Architectural work. Also responsible for Construction Engineering: e.g., designed:

- a. The formwork for many structures, including tendon gallery, reactor building ring girder, and borated water storage tank encasement.
- b. The Cofferdam, Dewatering, and Shoring System for the Nuclear Services Seawater Sumps.
- c. The Beaching Slip for Barge Delivering the Reactor Vessel, and the Structural Supports for "Walking" vessel off the barge.
- d. The Construction Dewatering Systems, including those for Intake and Discharge Structures.
- e. The facilities to receive by rail and unload the (2) 600 ton steam generators and pressurizer.
- f. The Guy Anchors for the Derrick erecting the Nuclear Steam Supply System.
- g. The Foundations, Supports, Shoring System, and Skids for Lifting Frame for erection of the Generator Inner Core.
- h. Platforms and Transfer Structure for moving equipment into Reactor Building through Equipment Hatch.
- i. The Rail System and Ballast for the Construction Traveling Tower Crane.
- j. The Modular Weights and Lifting Frames for testing all station cranes.
- k. Designed Plant's watertight gates and doors.
- l. Analyzed structures for adequacy to support construction cranes, equipment, and loads.

## TECHNICAL QUALIFICATIONS

Mr. Antonio A. Padilla - Production Engineering, Engineer II, Fossil Engineering

1. Job Responsibilities

An Engineer II (Mechanical), Fossil Engineering, performs detailed engineering for solution of problems associated with the design, procurement, and installation of mechanical systems in existing fossil fired power plants and peaking units.

2. Education

BSME - University of Central Florida, 1975

3. Nuclear Training

Nuclear Power Plant Theory - Part of Power Plant Course in College.

4. Nuclear Experience

December, 1975 - February, 1976 - Worked on the completion of the Crystal River Unit #3 Nuclear Plant reliability data, reporting to the Plant Performance Supervisor.

5. Other Experience

Florida Power Corporation: Three and one-half (3-1/2) years engineering experience in the design of steam and gas turbine power plants.

Registered Engineer-in-Training in the State of Florida.

## TECHNICAL QUALIFICATIONS

Mr. John L. Parker - Alternate Fleet Services Supervisor

1. Job Responsibilities

General responsibility for supervision of the St. Petersburg Garage, (major) providing garage service for the Lower Suncoast and Central Division.

2. Education

High School - Graduate

3. Nuclear Training

None

4. Other Training

Automotive Mechanical Repair  
Automotive Paint-Body Repair  
Managing and Motivating  
Management-Foreman  
Time Management and Delegation

5. Summary

Supervision of garage foremen and general personnel administration of garage personnel to maintain efficient operational procedures.  
Establish weekly/monthly priorities on vehicle repairs.  
Prepare schedules and coordinate shift operations.  
Prepare and administer construction, operation and maintenance budgets.  
Scheduling/expediting of annual inspections on derrick/aerial bucket trucks and trailers.  
Scheduling and supervision of three mechanics assigned to the Central Division.  
Supervise maintenance of vehicles assigned to Central Division.  
Coordinate the delivery of new vehicles and equipment; service and modify as required.  
Authorize local purchases and services from outside vendors.  
Schedule vehicles to and from the field.  
Responsible for garage facilities and housekeeping.  
Responsible for quality and quantity of work.

6. Experience

Thirty-nine years - Automotive-Mechanized equipment repair.

## TECHNICAL QUALIFICATIONS

Mr. R. E. Parnelle - Manager, Environmental Operations

### 1. Job Responsibilities

The function of this position is the management of all activities relating to environmental permitting of operating power plants. This includes, but is not limited to, air pollution - gases, particulates, and noise; water pollution - thermal, sewage, and other waste waters generated by power plants. Maintain liaison with local, state and federal environmental control agencies to ascertain requirements of current rules and regulations. Report to management the status of operating power plants compared with regulatory environmental emission standards. Maintain liaison with other electric utilities concerning environmental related activities.

### 2. Education

Bachelor of Science Degree in Forestry, University of Florida - 1948.

Bachelor of Science Degree in Mechanical Engineering, University of Arizona - 1965.

Professional Engineer (Fla. Reg. 17221)

#### Courses only:

Air Pollution Control Technology

Control of Particulate Emissions

Control of Gaseous Emission

Visible Emission Evaluations

Analysis and Control of Thermal Pollution

### 3. Nuclear Training

Production Staff Nuclear Training (FPC) - 1972.

Basic Radiological Health (FPA) - 1972.

Management of Radiation Accidents (EDWAP) - 1972.

Design Training (FPC) - 1972.

Technical Specifications (FPC) - 1973.

Mr. R. E. Parnelle (Cont'd)

3. Nuclear Training (Cont'd)

Thermo Nuclear Delivery Course (USAF).

4. Summary

Mr. Parnelle retired from the U.S. Air Force with the rank of Lieutenant Colonel and began to work for Florida Power Corporation in October 1969. He was assigned to the Plant Performance Section before being selected in January 1970, to devote his full effort to the Environmental Area. In September, 1975, he was transferred to the Environmental and Licensing Affairs Department where he is now assigned.

## TECHNICAL QUALIFICATIONS

Mr. D. W. Pedrick, IV - Compliance Engineer-Nuclear

### 1. Job Responsibilities

The Compliance Engineer is directly responsible to the Nuclear Plant Superintendent in providing assurance that the Nuclear Plant is being operated and maintained in accordance with the Plant Operating Manual, Technical Specifications and all applicable portions of the Code of Federal Regulations. His primary tool is systematic audit of all plant operating and maintenance functions related to the safety of the plant. He reviews all documentation including purchase requisitions for compliance to applicable criteria. Work and Quality Control procedures to be used in all phases are reviewed by the Compliance Engineer. He generates written reports when any discrepancies are found. During NRC I&E inspections, he accompanies and assists the inspectors as directed by the Nuclear Plant Superintendent. He also assists the General Review Committee with their audits of the Operating Quality Assurance Plant. The Compliance Engineer works closely with the plant staff in contract negotiations, cost analysis, and primary system inspections. He assists in the instruction and qualification of Non-destructive Examination personnel.

### 2. Education

Bachelor of Science, U.S. Merchant Marine Academy - 1964.

Completed American Welding Society - School of Welding Technology Course of Inspection and Testing of Welds.

### 3. Nuclear Experience

He has had a total of 4.8 years of nuclear experience. He worked for 2.5 years as Engineer II in the Quality Surveillance level of the Quality Program on construction, and 1.0 year in the position of Quality Engineer, covering all areas of nuclear plant construction. He held the position of Compliance Engineer-Nuclear for 4.5 years.

### 4. Summary

Mr. Daniel W. Pedrick, IV, Compliance Engineer-Nuclear, graduated from the U.S. Merchant Marine Academy in 1964 with a Bachelor of Science Degree, having majored in Mechanical/Marine Engineering. At that time, he was licensed Third Assistant Engineer Steam and Diesel - Any Horsepower, by the U.S. Coast Guard, and commissioned Ensign - U.S. Naval Reserve. He sailed as Senior Engineering Watch-stander for two years in the U.S. Merchant Marines and then worked in Design and Test Engineering positions with Philadelphia Gear Corporation. His other

4. Summary (Cont'd)

engineering/operator experience includes two years as Engineer on large (up to 3950 HP) sea-going tugboats and billets as Engineering Officer on U.S. Naval vessels in the U.S. Naval Reserve, in which he gained the rank of Commander. He is presently Commanding Officer of Shore Intermediate Maintenance Activity, Mayport Florida, 508.

While working as Engineer II with FPC Generation Quality and Standards, he coordinated the formation of the Southeastern Electric Exchange Quality Assurance Committee, and held the position of Chairman of that group for more than two years. During this period, Mr. Pedrick was responsible for assisting in the development and implementation of all aspects of the construction phase of the Quality Program for Florida Power Corporation. On September 1, 1972, he was promoted to Quality Engineer-Crystal River Unit #3, which position gave him site responsibility for implementation of the Quality Program in addition to responsibility for maintenance and audit of the Quality Program documentation files. In this position, he directed the activities of five engineers, and as many as five technical and clerical assistants.

He acted in the position of Compliance Engineer-Nuclear from September 1973 to March 1978.

Since March 1978, he has held the position of Quality Manager on the Crystal River Units 4 & 5 project, responsible for developing and managing the formal Quality Program for Engineering through startup of two (2) 640 MWe coal-fired power plants.

## TECHNICAL QUALIFICATIONS

Mr. G. D. Perkins - Health Physics Supervisor

1. Job Responsibilities

The Health Physics Supervisor is responsible for the development and control of a comprehensive program of radiation protection necessary for maintaining all personnel exposures to ionizing radiation as low as is reasonably achievable.

2. Education

High School Graduate, Aqua Fia Union High School, 1964.

University of Arizona, 3 semesters, 1964 - 1965.

New York Institute of Technology, 25 semester hours, 1975-1976.

3. Nuclear Training

He has a total of 35 weeks (0.7 years) of classroom training and 25 weeks (0.5 years) of practical training at an operating nuclear plant from the U.S. Navy Nuclear Power Training Program.

4. Nuclear Experience

He has a total of 11.0 years of nuclear experience including radiological supervision, testing and maintenance, procedural preparation, applied health physics, and practical operating experience.

5. Summary

Mr. G. D. Perkins, Health Physics Supervisor, began employment with Florida Power Corporation on June 19, 1972, as a Laboratory Technician at Crystal River Unit #3. His work involved procedure development, reactor operators and balance of plant training programs, and the chemistry laboratory and health physics service room set-up and evaluation. He was promoted to the position of Health Physics Supervisor on April 28, 1975.

Prior to this employment, he spent six years in the U.S. Naval Nuclear Power Program. Three of these years required applied health physics and chemistry responsibilities associated with the operation of nuclear powered submarines. This included two shipyard overhauls with specific duties pertaining to power plant chemistry and radiological evaluations, supervising and stipulating requirements of all maintenance and activities involving radiation and contamination control.

Since plant startup, Mr. Perkins has provided Health Physics supervision during a refueling outage and a seven-month forced outage that required control and handling of activated core components, as well as, contamination and dose control.



## TECHNICAL QUALIFICATIONS

Mr. Harold M. Perry - Senior Quality Auditor

### 1. Job Responsibilities

Assist in establishing and implementing a corporate quality assurance program to assure that FPC organizational elements are provided the requisite minimum standards with which they are committed to comply. Measure the effectiveness of implementation through various management techniques described below.

### 2. Education

Scott High School, Madison, W. Va., Grad. General, 1943

Concord College, Athens, W. Va., 2 years, Math & English, 1943-45

University of Michigan, Ann Arbor, Mich., 1 year, Music, 1947-48

Brevard Community College, Cocoa, Fl., 48 sem. hrs., R&QA

#### Military & Technical Schools

USAF - Lackland AFB, San Antonio, Texas, OCS (Admin.) 6 mos. Grad.

USAF - Keesler AFB, Biloxi, Miss., Radar, 9 mos., Grad.

USAF - Gunter AFB, (ECI), Miss., Electronics Fund., 300 hrs., Grad.

USAF - Gunter AFB, (ECI), Miss., Fund. Prin. of Guided Missile,  
144 Hrs., Grad.

USAF (Civil Serv.) - Los Angeles, Ca (Autoretics, NAA), Inert. Nav.,  
6 mos., Grad.

Philco (Civil Serv.), Heath, Ohio, Inert. Navig., State of the Art,  
3 mos., Grad.

Goodyear Atomic, Piketon, Ohio, Pneumatic, Automatic & Hydraulic Cont.  
Systems, 3 mos., Grad.

Goodyear Atomic, Piketon, Ohio, Nuclear Theory & Safety (est.) 6 mos.

### 3. Nuclear Training

In addition to the Nuclear Theory and seven (7) years experience in operation of a nuclear diffusion plant, performed as Electrical QC Engineer during construction of FPC's CR #3 power plant.

ETibbs(T.SpecHMP)DI

4. Nuclear Experience

1977 - Present. Senior Quality Auditor, QPD, FPC

1973 - 1977. QC Engineer, E. C. Ernst Electrical Contractor,  
Constructor of Nuclear Power Plant.

1954 - 1961. Process Operator, Gaseous Diffusion Plant, Portsmouth  
Area Atomic Plant (Employer - Goodyear Atomic Corp.)

5. Summary

Mr. Harold M. Perry, Senior Quality Auditor, began employment with  
Florida Power Corporation in February of 1977.

Immediately prior to coming with FPC, Mr. Perry was the designated QC  
Engineer for the E. C. Ernst Electrical Contractor during construction  
of the CR #3 facility and was in that position during final transfer  
of all quality documents from the electrical construction contractor  
to FPC quality manager.

For seven (7) years, he worked in a gaseous diffusion plant (operated  
by Goodyear Atomic Corporation under contract to AEC) where the  
isotopes of uranium were separated and enriched while in UF<sub>6</sub>  
(yellowcake) form.

Additionally, Mr. Perry has some 15 years total experience in quality  
programs (Air Force, Civil Service & NANA), as well as approximately  
12 years supervisory experience.

ANCLOTE PLANT

NAME Norman A. Peterson

TITLE Plant Engineer

EDUCATION B.S.E. 1975 University of  
Florida (Mechanical)

TECHNICAL EXPERIENCE (MAN-YEARS)

a. ENGINEERING

(1) ENGINEERING MANAGEMENT

(2) TOTAL UTILITY EXPERIENCE

3-1/2

b. FIELD

(1) ELECTRICAL ENGINEERING

(2) MECHANICAL ENGINEERING

(3) MECHANICAL MAINTENANCE

(4) ELECTRICAL MAINTENANCE

(5) INSTRUMENT & CONTROL MTCE.

(6) CHEMISTRY

(7) POWER PLANT OPERATIONS

F

N

3-1/2

3-1/2

3-1/2

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(NAP)D69

456 173

## TECHNICAL QUALIFICATIONS

Mr. W. C. Pittman - Mechanical Supervisor-Nuclear

1. Job Responsibilities

The Mechanical Supervisor-Nuclear is responsible to the Maintenance Superintendent for all mechanical maintenance activities within the nuclear power plant.

2. Education

High School Graduate, Glynn Academy, Brunswick, Georgia - 1952.

One semester college math, South Carolina - 1952.

Management and Motivation seminar, FPC - 1978.

3. Nuclear Training

He has over 545 hours of nuclear classroom training.

4. Nuclear Experience

He has a total of six (6) years nuclear experience including startup, testing, operation and refueling.

5. Summary

Mr. W. C. Pittman, Mechanical Supervisor-Nuclear, graduated from Glynn Academy, Brunswick, Georgia in 1952. He attended college in South Carolina, undergoing one semester of college math. He has been a Boiler Maker Mechanic for nineteen years with various companies including Babcock & Wilcox. He joined Florida Power Corporation in 1968 as a Certified Welder Mechanic-Nuclear. He was promoted to the position of Mechanical Supervisor in 1977. He has acquired experience in all phases of power plant construction, startup, operation and mechanical maintenance.

## TECHNICAL QUALIFICATIONS

Mr. F. W. Pluebell - Electrical Supervisor

1. Job Responsibilities

The Electrical Supervisor is responsible to the Maintenance Engineer for electrical maintenance activities in the power plant.

2. Education

High School Graduate, Hyattsville, Maryland - 1954.

Eighty-two (82) Academic Credit hours, University of Maryland - 1954 through 1958.

3. Nuclear Training

He has had a total of eight weeks (0.2 years) of classroom training.

4. Nuclear Experience

He has a total of seven (7) years of nuclear experience including design supervision, testing, startup, operation and refueling.

During design and construction, he has made trips to Florida Power Corporation's Generation Engineering and Construction for comment and evaluation purposes.

5. Summary

Mr. F. W. Pluebell, Electrical Supervisor-Nuclear, graduated from Northwestern High School, Hyattsville, Maryland in 1954. He attended the University of Maryland from 1954 to 1958 on a part-time basis, completing 82 academic credit hours. He went to work for Potomac Electric Power Company, Washington, D.C., in 1958 as a Helper in the Test Department, advancing through the ranks of Junion, Second Class and First Class. He acquired a Red Cross and Medical Self-Help Instructor's card in 1965 and also attended a class in cardio-pulmonary resuscitation at John Hopkins in Baltimore, Maryland.

During his employment with PEPCO, he attended courses in Transformer Construction and Connection, Voltage Regulator Construction and Connection, Potential Transformer and Current Transformer Connections, Lighting Arrestor Application and Testing, High Voltage Testing, Doble Testing, Megger Testing, Design and Construction of Test Equipment, L & N Control Computers, Digital Control Supervisory Equipment, Applied Protective Relaying, and ICS Electrical Engineering. He had the prime responsibility for installation, switching and testing

coordination on high voltage construction and low voltage coordination and tests between PEPCO, the U.S. Government, and the contractor on several government projects such as: Agriculture Department, Main Building, Washington, D.C., Census Bureau, Suitland, Maryland, etc.

He supervised crews of 3-12 men directly, was instrumental in the initiation of classes for new men, and taught classes he designed in Schematic Reading and Understanding, High Voltage Switching, and Basic Relay Design and Application. He designed numerous test methods and equipment, was involved in all matters of Electrical testing on installation of two fossil-fired units, and performed a yearly inspection of protective systems of all company equipment: generators, high voltage motors, transformers, air circuit breakers, oil circuit breakers, voltage regulators and substations as a whole. He has been responsible for analyzation and correction of high voltage breakdown and control circuit malfunction of numerous and varied equipment.

In 1967, he transferred from PEPCO as a First Class Tester to Florida Power Corporation as a Relay Technician. At Florida Power Corporation, he assumed responsibility in conjunction with the Generation Engineering Department for testing and placing in service four Worthington Peaking Units. He was then assigned to the Crystal River Fossil Plant for testing of Unit 2. After Unit 2 was placed in service, he reported to the Electrical Mechanical Construction Supervisor to solve problems of equipment not complete at startup. He was then promoted to Electrical Supervisor-Nuclear and temporarily assigned to the Suwannee River Plant as Supervisor of Construction on the modernization program which included the supervising of construction electricians, pipe fitters, laborers, carpenters and surveyors. The job consisted of High Pressure Steam Modifications, Turbine Modifications, Control Modifications, and the complete relocation of Generator Control and Metering. As the company representative on the job, he handled all phases of construction, testing, and placing in service of the above. He was transferred to Bartow Peaking Units to help with startup testing. He has received the commendation of Government and Company Supervisor with whom he has worked. At the time of initial core loading, he had 19 years of responsible power plant or applicable industrial experience, five years of which were nuclear power plant experience. He has attended schools directly related to plant equipment, such as: Stromburg/Carlson Pitone System, Crane Chem-Pumps, Westinghouse Brushless Exciter, DP CRD System, Westinghouse E-H Control System, Basic Fire Fighting and Fairbanks-Morris Diesel Engines.

## TECHNICAL QUALIFICATIONS

Mr. D. E. Porter - Production Department, Maintenance Services,  
Maintenance Planning Engineer

1. Job Responsibilities

Develop steam unit maintenance (outage) schedules, short term and long term. Plan craft manpower resources to be furnished to maintenance activities at steam units. Coordinate budget development.

2. Education

BEE, University of Florida - February 1962 (Graduate)

3. Nuclear Training

Possess degree of technical background with CR-3 instrumentation and controls and systems engineering.

4. Nuclear Experience

December 1977 - Present - Maintenance Planning Engineer

January 1976 - November 1977 - temporary assignment to CR-3 staff to organize surveillance requirements, develop master surveillance procedure program, coordinate and manage procedure writing/approval/implementation.

July 1974 - January 1976 - Project Services Manager, Nuclear Projects Department. No applicable experience.

5. Other Experience

June 1971 - July 1974 - Fossil Project Coordinator, Generation Engineering Department. No applicable experience.

January 1969 - June 1971 - Control Engineer, Generation Engineering Department. Responsible for supervision of FPC's instrumentation and control engineering and for the coordination of all related control engineering associated with the design, construction and startup of control and instrumentation systems in new electric generating facilities, including nuclear (CR-3).

## TECHNICAL QUALIFICATIONS

Mr. H. E. Reeder - Shift Supervisor

### 1. Job Responsibilities

Responsible to the Operations Engineer to plan, supervise, and coordinate the duties and training of operating personnel assigned to his shift. Serves in an advisory consulting capacity as regards to plant operations. Is responsible for all operating activities and is the sole authority at the plant when immediate supervisors are not present.

### 2. Education

High School Graduate, Avon Park High School - 1948.

Principles Steam Electric Power Plant (ICS) - 1958.

Stationary Steam Engineering (ICS) - 1963.

Public Speaking and Human Relations (DCI) - 1967.

Divisions I and II Electrical Engineering (ICS) - 1969.

### 3. Nuclear Training

He has had a total of 61 weeks (1.2 years) of classroom training, including Phase 1, 2, 3, 4, 5, and 6 as stated in Section 12.2.

### 4. Nuclear Experience

He has had a total of 9 years of nuclear experience including design review, engineering design, design supervision, startup and testing, and operating experience.

### 5. Summary

Mr. H. E. Reeder, Shift Supervisor, graduated from Avon Park High School, Avon Park, Florida in 1948. He was employed by Florida Power Corporation as a Plant Apprentice in 1949 and has been with Florida Power Corporation since that time, with the exception of four years active duty in the U.S. Air Force. He progressed through the Operating classifications at the Avon Park Steam Plant (59 MW) and the Suwannee River Steam Plant (153 MW) to Plant Operator, being involved with the initial startup of the Suwannee River Unit 3 (75 MW). While at Suwannee River, he completed the International Correspondence School course in Stationary Steam Engineering and Divisions I and II of Electrical Engineering before transferring to Crystal River Unit #3 as Shift Supervisor in September of 1969. He has 30 years of power plant experience.

ETibbs(T.SpecHER)D4



Mr. H. E. Reeder (Cont'd)

5. Summary (Cont'd)

He has acquired the experience and satisfactorily completed an NRC approved training program which utilizes a complete and accurate nuclear power plant simulator as part of the program required for examination by the NRC for a Senior Reactor Operator's License and holds a Senior Reactor Operator's License for CR-3.

ETibbs(T.SpeCHER)D4

## TECHNICAL QUALIFICATIONS

Mr. William P. Reilly, III - Maintenance Superintendent, Higgins Power Plant

1. Job Responsibilities

The Maintenance Superintendent is responsible for design and administration of plant maintenance programs.

2. Education

BS Electrical Engineering, Georgia Tech - 1974

3. Nuclear Training

Orientation course given at CR #3 to obtain badge.

4. Nuclear Experience

None

5. Summary

Seven years total utility experience in power plant maintenance.  
(Fossil fuel)

## TECHNICAL QUALIFICATIONS

Mr. Robert H. Rottloff - Production Engineering, Engineer II, Fossil Engineering

### 1. Job Responsibilities

The responsibilities of the Engineer II are to plan, coordinate, design and assist in construction of electrical projects for fossil fuel generating units, peaking units, and their associated auxiliary equipment.

### 2. Education

AA, St. Petersburg Jr. College - 1969.  
BSE, University of South Florida - 1972.

### 3. Nuclear Training

None

### 4. Nuclear Experience

August 1972 - June 1973 - Test Engineer, Florida Power Corporation. Responsible to Manager of Power Test Group for writing and reviewing of electrical test guides and test procedures for Crystal River Unit #3 Nuclear Plant.

March 1975 - May 1977 - Engineer at Crystal River Unit #3 construction site. Responsible to Chief Electrical Engineer for electrical design, procurement and approval of test procedure and test results for Crystal River Unit #3 Nuclear Plant.

May 1977 - November 1977 - Engineer responsible to Chief Engineer for electrical design, preparation of engineering studies, equipment specifications, evaluate proposals, job schedules, and design verification for Crystal River Unit #3 Nuclear Plant.

### 5. Other Experience

Florida Power Corporation: Three and one-half years experience in the design of electrical systems for fossil fuel generating units, and gas turbine peaking units.

Registered Engineer-in-Training in the State of Florida.

## TECHNICAL QUALIFICATIONS

Mr. D. J. Rowland - Director, Fuel & Special Projects

### 1. Job Responsibilities

The function of this position is department head responsible for procurement of fossil and nuclear fuel and related services. Also studies of future fuel cost and availability and of fuel types for new generating units.

### 2. Education

Bachelor's Degree in Mechanical Engineering, Auburn University - 1958.

Courses only:

- A. Completed Elements of Nuclear Energy Course - International Correspondence School. (September, 1965)
- B. Attended Nuclear Power Reactor Safety Course - Massachusetts Institute of Technology. (September, 1967)

### 3. Nuclear Training

- A. 1960 - Nuclear Power Seminar (Westinghouse Electric Corporation).
- B. 1960 - U.S. Public Health Service Environmental Radiation Surveillance Course.
- C. 1961 - Radiological Monitor Instructions Course (U.S. Department of Interiors).
- D. 1965 - Management of Radiation Accident Course (U.S. Department of Health, Education, and Welfare).
- E. 1967 - Nuclear Technology Introduction (B&W).
- F. 1969 - Nuclear Core Analysis Workshop (NUS).
- G. 1970 - Advanced Nuclear Fuel Management Workshop (NUS)
- H. 1971 - Nuclear Fuel Cost Computer Code Seminar (Nuclear Associates International).

### 4. Nuclear Experience

#### A. Engineering

1961 - 1965. Mechanical - Nuclear Staff Engineer Power Plant Engineering.

ETibbs(TechSpec)D75

4. Nuclear Experience - (Cont'd)

1967 - 1969. Head Mechanical - Nuclear Design Section of Power Plant Engineering Department

1969 - 1972. Senior Fuel Engineer, major responsibility for out-of-core nuclear fuel management activities.

1975 - Present. Director - Fuel & Special Projects - responsible for all Nuclear Fuel Procurement.

B. Quality

For the Crystal River Unit #3, Mr. Rowland was responsible (1967-69) for the sections of the Preliminary Safety Analysis Report (PSAR) pertaining to Nuclear and Mechanical Systems and for proper implementation of the Quality Program pertaining to nuclear and mechanical equipment such as pumps, tanks, piping, and valves.

5. Summary

Mr. Rowland was responsible for developing the overall plan for the contractual arrangements required for Crystal River Unit #3 Nuclear Fuel Cycle. This involved consideration of the schedule requirements, cost, financing considerations, quality and quantity control, and compliance with AEC regulations for every step of the fuel cycle including mining, milling, conversion, enrichment, fabrication and reprocessing.

Mr. Rowland assisted the Production Department in the development of plans and procedures to implement and "In-Core" fuel management program. He also assisted the Generation Engineering Department in the development of Procedures to implement the Quality Program for Nuclear Fuel Fabrication.

## TECHNICAL QUALIFICATIONS

Mr. John G. Ruppel - Production Engineering, Electrical Engineer

1. Job Responsibilities

Provide electrical engineering as required to perform modifications to existing fossil power plants. Includes preparation of studies, work orders, and detailed design work.

2. Education

BSEE, University of Pittsburgh, PA - 1960.

3. Nuclear Training

None

4. Nuclear Experience

The following work was done at Gilbert Associates, Inc., Reading, PA. The customer was Korea Electric Company, the Ko-Ri Unit #1 Plant:

November 1971 - December 1972 - Assit in preparation of electrical design criteria.

Checking elementary wiring diagrams.

5. Other Experience

Florida Power Corporation: Six (6) years experience in the design of gas turbine power plants and modifications to existing steam plants.

May - October 1971 - Salem Corporation. Electrical estimator for industrial furnaces.

November 1966 - May 1971 - Electrical Design Engineer, J&L Steel Company.

November 1964 - November 1966 - Electrical Application Engineer, Mesta Machine Company. Heavy rolling mills.

June 1964 - November 1964 - Development Engineer, American-St. Gobain Corporation. Glass manufacturing processes.

September 1960 - June 1964 - Field Service Engineer, General Electric Company, I&SE Department.

Registered Professional Electrical Engineer in the State of Florida.

ETibbs(Ruppel)D81

## TECHNICAL QUALIFICATIONS

Mr. G. H. Ruzala - Radwaste Supervisor

### 1. Job Responsibilities

The Radwaste Supervisor is responsible for managing the entire waste scheme at Crystal River Unit 3. He develops and maintains programs and criteria for radioactive and non-radioactive waste management and controls to support plant operations. He plans for utilization of finite volumes for storage, determining processes for waste volume reduction, and prescribes methods and limits to prepare systems for maintenance and inspection.

### 2. Education

Mr. Ruzala is a high school graduate, having pursued a major in Chemistry at the University of Buffalo for two years, one year at Florida State University, and an additional semester at the University of Delaware where he studied stationary engineering.

### 3. Nuclear Training

Mr. Ruzala has completed a variety of special training courses, including six weeks of reactor chemistry study by Westinghouse; laboratory instrument school for atomic absorption, gamma spectroscopy, liquid scintillation, and gas chromatography; a two week course in MCA and gamma spectroscopy at the U.S. Public Health Center; and a three month course in Westinghouse nuclear plant systems at the Pittsburg plant.

### 4. Nuclear Experience

Mr. Ruzala has 15 years of diversified nuclear experience, 12 of which have been in management and supervision capacities. The majority of this experience has been in Health Physics and Chemistry associated with nuclear power plant startup and operation. He also worked in nuclear fuel reprocessing endeavors at West Valley Plant where considerable experience was gained in managing large amounts of radioactivity in various chemical forms, including mixed fission products and transuranic elements.

## TECHNCAL QUALIFICATIONS

Mr. Roger P. Schmiedel - Production Engineering, Project Engineer

1. Job Responsibilities

Perform and be responsible for electrical design engineering and/or engineering coordination for projects associated with the Crystal River Unit #3 Nuclear Plant. Provide engineering services to support other Nuclear Plant activities such as licensing.

2. Education

BSE - University of Alambama, Huntsville, Alabama, 1973

3. Nuclear Training

"Nuclear Operations Quality Assurance" presented by FPC Quality Programs Department, February, 1978.

"Qualification of Safety-Related Equipment for Nuclear Power Generating Stations", presented by Drexel University and IEEE, November, 1978.

"Fire Protection for Nuclear Power Plants" course given by National Loss Control Service Corp., and Professional Loss Control, Inc., July, 1978.

4. Nuclear Experience

Florida Power Corporation: Engineer, December, 1977 to April, 1979. Responsible to the Chief Electrical Engineer for electrical design and procurement for Crystal River Unit #3. Project Engineer: April, 1979 to Present. Responsible to the Manager Nuclear Engineering for providing electrical engineering and design services for Crystal River Unit 3.

5. Other Experience

Six (6) years experience with Florida Power Corporation, four (4) years of which were in Transmission Line Design, and two (2) years in nuclear power plant electrical modifications and design.

Six (6) years experience with Red River Army Depot, Texarkana, Texas, as an electronic/mechanical-optical instrument technician.

E.Tibbs (T.SpecRPS)D69

456 186



## TECHNICAL QUALIFICATIONS

Mr. Donald A. Shook - Manager, Nuclear Engineering

### 1. Job Responsibilities

The Manager, Nuclear Engineering, has lead responsibility for providing engineering and design services to the Crystal River #3 Nuclear Plant to meet Florida Power Corporation and regulatory requirements. Provide engineering services and manpower as required to support Nuclear generation related studies, research and development projects, site licensing, and other activities.

### 2. Education

BSEE - University of Cincinnati - 1967.

### 3. Nuclear Training

Principals of Nuclear Engineering Course given by FPC Nuclear Engineer 1969, Instruction & Operation of Training Reactor at University of Florida.

### 4. Nuclear Experience

Engineer: May, 1970 - June, 1971 - Engineer reporting to the Electrical Engineer for assignments on Crystal River Unit #3.

Electrical Engineer: June, 1971 - August, 1974 - Responsible to the Department Manager for the electrical design and procurement for Crystal River Unit #3.

Chief Electrical Engineer: August, 1974 to November, 1977 - Responsible to the Department Director for the electrical design of Crystal River Unit #3 and any additional nuclear projects.

Manager, Nuclear Engineering: November, 1977 to present. Responsible to the Department Manager for providing engineering and design services to the Crystal River #3 Nuclear Plant.

### 5. Other Experience

Twelve (12) years experience with Florida Power Corporation in the design of steam power plants, nuclear power plants and gas turbine peaking units.

Registered Professional Engineer in the states of Florida and Ohio.

## TECHNICAL QUALIFICATIONS

Mr. E. C. Simpson - Nuclear Support Specialist, Reporting Services

### 1. Job Responsibilities

The basic function of this position is to assure that all required reports arising from the operation of Florida Power Corporation nuclear plants are properly prepared, approved and submitted to the appropriate departments, agencies or groups in a timely fashion. In addition, this position will monitor and analyze changing regulatory requirements for applicability to nuclear plant operations and will assume primary responsibility for coordinating responses to regulatory agency inquiries.

### 2. Education

- A. Bachelor of Science Degree in Electrical Engineering -  
University of Florida - 1971.
- B. Bachelor of Science Degree in Nuclear Engineering Sciences -  
University of Florida - 1972.

### 3. Nuclear Experience

1972-1975 Participated in the evaluation and development of siting criteria required for the execution of the company siting program for new nuclear and fossil units.

1975-Present Directed preparation of licensing documents for CR#3 as required by appropriate governmental agencies to acquire all licensing approvals necessary to allow continued safe operation of CR#3.

### 4. Summary

Mr. Simpson began his employment with Florida Power Corporation in June of 1972 in the position of Engineer-Nuclear Affairs Department. Major tasks of this position were coordination and development of responses to NRC requests for additional information and updating the FSAR for Crystal River #3. In addition, Mr. Simpson was responsible for coordinating the efforts of FPC and B&W with those of the NRC in the development of the Environmental Technical Specifications and Standardized Technical Specifications for CR#3.

In October, 1975, Mr. Simpson was promoted to his present position as Nuclear Support Specialist for CR#3.

He is a member of the Florida Section of the American Nuclear Society and is an active member of an ANS Standards Committee (ANS 2.8 Working Group).

## TECHNICAL QUALIFICATIONS

Mr. Ronald H. Smith - Senior Quality Auditor

1. Job Responsibilities

The primary functions of this position are to:

Assist in establishing and implementing a corporate quality assurance program to assure that FPC organizational elements are provided the requisite minimum standards with which they are committed to comply. Measure the effectiveness of implementation through various management techniques by performing internal audits to assure Florida Power Corporation compliance with imposed regulatory requirements.

2. Education

Two years of study at Roanoke Technical Institute; A. S. in Electrical Engineering.

Additional courses taken at:

University of Virginia  
Virginia Polytechnical Institute  
Christopher Newport College

3. Nuclear Training

Health Physics; Procurement; Quality Assurance Auditing;  
Nondestructive Testing.

4. Nuclear Experience

Mr. Smith currently is a Senior Quality Auditor in the Quality Programs Department. He has fifteen (15) years experience in the nuclear industry. During this time, he has been actively involved in the design, procurement, manufacture, and quality review of nuclear power plant components. He also has been involved in the refueling of ten (10) naval nuclear reactors and on-site experience during the construction phase of commercial nuclear units.

5. Summary

April 1979 to Present - Senior Quality Auditor, Quality Programs Department.

July 1978 to April 1979 - Quality Assurance Lead Audit Engineer at Waterford #3 Nuclear Power Station, Taft, La. In charge of Audit Group. Supervise and participate in on-site audits to verify compliance with approved procedures, Q.A. Manual, and 10CFR50. Also

ETibbs(T.SpecRHS)D4

456 187

Mr. Ronald H. Smith (Cont'd)

5. Summary (Cont'd)

responsible for vendor surveillance program to ascertain vendor's capability to supply materials or services. Review and approve all procurements from a quality standpoint.

March 1976 to July 1978 - General Manager of Electronic Control Equipment Plant for Bailey Meter Company, a subsidiary of Babcock & Wilcox Company, located in Williamsport, Pa. Had complete responsibility for budgetary, P&L, and facilities planning including Shop Operations, Materials Management, Procurement, Manufacturing, Engineering, Quality Assurance and Personnel. General Management was total with the exception of Marketing and Product Design which was provided by Main Operations in Wickliffe, Ohio.

November 1975 to March 1976 - Quality Assurance Manager. Extensive and proven experience in auditing, quality program generation, and vendor surveillance with the Nuclear Power Generation Division of Babcock & Wilcox, was responsible for appointment as Quality Assurance Manager at the Williamsport Facility. Performance in the Management of the Quality Assurance Department contributed to promotion to General Manager at the facility.

July 1974 to November 1975 - Quality Assurance Audit Team Chief for Babcock & Wilcox's Nuclear Power Generation Division at Lynchburg, Va. Headed team of one to five persons, conducting complete system audits on primary and secondary vendors in order to ascertain production and quality control system capabilities of producing nuclear components according to code and procedure requirements. Certified as "Qualified Auditor" as specified in ANSI N45.2.23, Qualifications of Quality Assurance Audit Personnel for Nuclear Facilities.

July 1972 to July 1974 - Held the position of Procurement Coordinator reporting to the Purchasing Division Department Head for B&W's N.P.G.D. Responsible for maintaining a close liaison with vendors in order to follow fabrication of components during manufacturing cycle. Handled departmental administrative functions such as computer interface, internal systems, and budgeting. Job functions reporting were: expeditors (4), clerical staff and M.R.O. buyers.

April 1970 to July 1972 - Served as Quality Assurance Field Representative for B&W's N.P.G.D. Performed in-process and final inspections on procured equipment for nuclear installations. Reviewed data packages and witnessed hydrostatic performances and other nondestructive testing. Certified in MT, RT, PT, ASNT-TCLA Level II.

May 1966 to April 1970 - System Designer with Contract Engineering Section of B&W's N.P.G.D. Produced process piping layouts of primary and auxiliary systems on developing flow, pressure and temperature

Mr. Ronald H. Smith (Cont'd)

5. Summary (Cont'd)

instrumentation loops for these systems. Performed supervisory duties which included checking draftmen's input-output sheets and logic diagrams.

July 1964 to May 1966 - Radiological Control Technician for the Newport News Shipbuilding and Dry Dock Company, Newport News, Virginia. Responsible for controlling radiological hazards associated with construction, maintenance and refueling of naval power reactors. Responsibility involved personnel monitoring, area surveys, control and transfer of radioactive material, decontamination operations, and disposal of radioactive wastes. Acquired refueling experience in nine different naval nuclear plants.

July 1963 to July 1964 - Draftsman/Lab Technician for H.K. Porter Company, Lynchburg, Va. Assisted Project Engineering in the fabrication and testing of prototypes of new design power distribution equipment.

He is a member of the American Nuclear Society, the A.S.N.T. and the A.S.Q.C.

## TECHNICAL QUALIFICATIONS

Tracy L. Smith - Public Information Specialist  
Public Information Department  
Alternate, Public Relations Representative,  
Offsite Radiological Support Team

### 1. Job Responsibilities

The primary function of this position, Public Information Specialist, is to communicate, on a timely basis, company activities, operations, and accomplishments to various company publics, including employees, media, and consumers, through a variety of informational channels. Those channels include the media, person-to-person contact, and published brochures and booklets.

As part of the Offsite Radiological Support Team, the function of the position would be to act as designated company spokesman. The exception to this are statements of a regulatory nature required by the emergency coordinator. The set up of communications facilities for the news media and the providing of regular briefings to the press and governmental officials would be part of the overall duties.

### 2. Education

Bachelor of Arts in Mass Communications - University of South Florida, Tampa, Florida, 1973.

### 3. Nuclear Training

Attended Florida Power Nuclear Safety Training at Crystal River nuclear plant, Unit #3.

Participated in the Nuclear Power and the Energy Crisis Workshop presented by the Energy Education Office of Oak Ridge Associated Universities, April 1976.

### 4. Nuclear Experience

Participated in Offsite Radiological Support Team exercises, including the preparation of information releases, the establishing of communication center for media, press briefings, and critique review.

### 5. Summary

Mr. Tracy Smith began employment with Florida Power Corporation on June 6, 1973. While still attending college, he worked at the company, in a part-time status, in the Public Information Department in his present position, Public Information Specialist.

## TECHNICAL QUALIFICATIONS

Mr. Ned B. Spake - Vice-President Environment & New Technology

### 1. Job Responsibilities

Direct the overall operations of the company's Real Estate, Quality Programs, Environmental and Licensing Affairs and New Technology departments and activities. Serve as Chairman of the Corporation's Research and Development Committee and provide overall company direction for research and development work.

### 2. Education

Bachelor of Industrial Engineering Degree - University of Florida, 1957

Bachelor of Business Administration - Rollins College, 1967

Management Development Conference - University of Florida

Executive Management Course - Georgia Tech

PWR Simulator Training - Combustion Engineering, Inc.

Graduate Management Course - Edison Electric Institute

### 3. Technical Activities

Registered Professional Engineer - State of Florida

Member - National Society of Professional Engineers

Member - Florida Engineering Society

Member - International Solar Energy Society

Member - Solar Thermal Test Facility Users Association

Member - Technical Advisory Council - Florida Solar Energy Center

Member - International Association of Hydrogen Energy

Past Member - Orange County Electrical Board

Past Member - Cape Canaveral Council of Technical Societies

Past Member - American Institute of Industrial Engineers

Past Member - Technical Advisory Council - Valencia Junior College

Past Member - Commission on Engineering Education



4. Technical Experience

- A. DESIGN: Previous experience in the design of overhead and underground network loop and radial type electric distribution facilities, including (A) load, voltage, power factor and short circuit calculations; (B) construction and strength design for manholes, vaults and conduit systems; and (C) application of network protectors, capacitors, transformers, oil reclosers, sectionalizers, regulators, metering equipment and switchgear. Assisted in the design and installation of an integrated industrial gas turbine system with waste heat recovery boilers, including synchronizing and computerized load transfer systems, for load shedding and load transfer to the utility's electrical system. General responsibility for the detailed review of architectural, mechanical and electrical building design; high voltage transmission and substation design and power facilities.
- B. ELECTRIC SYSTEM OPERATIONS: Field familiarity with detailed operation of switching and transformation equipment up to 230 KV including actual operation experience with such equipment under emergency conditions. Familiarity with the latest in automatic transfer schemes, and computerized systems associated with the above equipment.
- C. CONSTRUCTION AND MAINTENANCE: Negotiation, preparation and issuance of contracts with electrical wiring contractors, line construction contractors, general building contractors and consulting and professional services. Performed engineering field inspection in connection with most of the above contract work to determine compliance with original design and contract requirements pertaining to materials, workmanship and quality.

5. Summary

Mr. Spake's experience in the electric utility industry totals over 23 years. He joined the Florida Power Corporation upon graduation and progressed through the distribution engineering design area to the position of Division Engineer, Winter Park Division, in 1962. Division Engineer responsibilities included construction and operation of the distribution system in Central Florida, as well as distribution engineering design.

In 1972, Mr. Spake assumed the duties of Director, System Engineering with management responsibility for the corporation's Transmission, Substation, Distribution, Civil Engineering, Building Design and Real Estate Departments. In 1974, he assumed additional responsibilities for the corporation's Fossil and Nuclear Engineering Department and later the Nuclear Plant Testing Department. With the advent of



Mr. Ned B Spake (Cont'd)

project management for all major company construction projects, responsibility areas changed in 1977 to those of Transmission, Substation and Building Engineering, Design and Construction Departments and the Real Estate Department. In the summer of 1978, assumed current responsibilities as Vice President of the corporation's Real Estate, Quality Program, Environmental and Licensing Affairs and New Technology Departments.

ANCLOTE PLANT

NAME Steven L. Stanbrough

TITLE Shift Supervisor

EDUCATION Thru 12th Grade High School  
6 Months U.S.A.F. Tech School -  
Diesel Power Production

TECHNICAL EXPERIENCE (MAN-YEARS)

- a. ENGINEERING
  - (1) ENGINEERING MANAGEMENT
  - (2) TOTAL UTILITY EXPERIENCE
- b. FIELD
  - (1) ELECTRICAL ENGINEERING
  - (2) MECHANICAL ENGINEERING
  - (3) MECHANICAL MAINTENANCE
  - (4) ELECTRICAL MAINTENANCE
  - (5) INSTRUMENT & CONTROL MTCE.
  - (6) CHEMISTRY
  - (7) POWER PLANT OPERATIONS
  - (8) U.S.A.F.

F

N

12-1/2  
0-1/2

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(SLS)D83

456 196

## TECHNICAL QUALIFICATIONS

Mr. D. G. Stocky - Manager, Boiler Maintenance

### 1. Job Responsibilities

The Manager, Boiler Maintenance is responsible for the planning, coordinating and directing of the activities of the Boiler Section, including an Engineer, student engineers and the System Maintenance Crew which consists of:

- 1 System Senior Mechanical Supervisor
- 3 Mechanical Supervisors
- 3 Mechanical Supervisors (temporary)
- 1 Engineering Technician
- 1 System Maintenance Clerk II
  
- 1 Master Mechanic
- 35 Certified Welder Mechanics
- 4 Mechanics
- 2 Electricians

130 Mechanics & Cert. Welder Mechanics (temporary)

### 2. Education

Mr. D. G. Stocky graduated from High School in Tampa in 1936 and attended the University of Florida in 1937 and 1938 taking a course leading to a degree in Electrical Engineering. He attended an additional year at the University of Tampa in 1940. He has taken selected subjects at the St. Petersburg Junior College.

### 3. Nuclear Training

Nuclear Technology Indoctrination (B&W) - 1967.

Production Managers Nuclear Training (FPC) - 1972.

Computer Familiarization (FPC) - 1972.

Introduction to Nuclear Power (NUS) - 1972.

- (a) Reactor Physics
- (b) Reactor Performance
- (c) Radiation Protection and Chemistry

Nuclear Plant Maintenance (B&W) - 1972.

Technical Specifications (FPC) - 1973.

Mr. D. G. Stocky - (Cont'd)

Nuclear Training (Cont'd)

Design Training (FPC) - 1973.

Systems Training - 1973.

4. Summary

He spent 12 years as a supervisor of Welding and Hull Construction in Tampa Shipbuilding Company Shipyard.

He has 5 years experience in utility boiler construction.

He spent 2 years in utility plant operation as an electrician followed by 10 years as Assistant Boiler Engineer on the Production Department Staff.

He has been Boiler Engineer for 17 years and Manager, Boiler Maintenance 2 years.

ANCLOTE PLANT

NAME Norman L. Sudduth

TITLE Electrical Supervisor

EDUCATION High School

TECHNICAL EXPERIENCE (MAN-YEARS)

a. ENGINEERING

(1) ENGINEERING MANAGEMENT

(2) TOTAL UTILITY EXPERIENCE

20 Years

b. FIELD

(1) ELECTRICAL ENGINEERING

(2) MECHANICAL ENGINEERING

(3) MECHANICAL MAINTENANCE

(4) ELECTRICAL MAINTENANCE

(5) INSTRUMENT & CONTROL MTCE.

(6) CHEMISTRY

(7) POWER PLANT OPERATIONS

F

N

X

X

\*Specify whether experience is (F) full time nuclear  
(N) non-nuclear

ETibbs(NLS)D69

456 199

## TECHNCAL QUALIFICATIONS

Mr. William J. Sullivan - Supervisor of Fleet Operations

1. Job Responsibilities

Specification and Procurement of all fleet vehicles. Administer fleet budgets, assignments and fleet information system.

2. Education

Bachelor Degree in Business Administration.

3. Experience

Ten years as Journeyman Mechnic

Seven years on Fleet Services Administrative Staff

Off-site Radiological Team

Transportation Specialist

## TECHNICAL QUALIFICATIONS

Mr. William A. Swyers - Production Engineering, Mechanical Project  
Engineer, Fossil Engineering

1. Job Responsibilities

Provide mechanical engineering design, project studies and construction work packages for improvement of fossil-fueled generating facilities. Responsible for all engineering activities as directed by the Manager, Fossil Engineering.

2. Education

BSME, Western New England College - 1966.

3. Nuclear Training

Limited to in-house orientation programs of Florida Power Corporation.

4. Nuclear Experience

None

5. Other Experience

Combustion Engineering: Five (5) years experience in the steam generator (fossil) performance standards and field testing group.

Florida Power Corporation: Five (5) years experience with the Plant Performance Group.

Registered Professional Engineer in the State of Florida.

## TECHNCAL QUALIFICATIONS

Mr. Robert S. Takami - Production Engineering, Project Engineer,  
Fossil Engineering

1. Job Responsibilities

Provide engineering services for Instrument and Control projects in Florida Power Corporation fossil fuel power plants.

2. Education

BSME - University of Florida, 1973

3. Nuclear Training

None

4. Nuclear Experience

None

5. Other Experience

General Electric Co: April, 1973 - September, 1977. Field Engineer. Installation and service support for G.E. gas turbines.

Florida Power Corporation: October, 1977 - May, 1979. Plant Engineer, technical support for plant operation and maintenance. May, 1979 - Present. Project Engineer, Instrument and Control Section of Fossil Group.



## TECHNICAL QUALIFICATIONS

Mr. Bruce A. Taylor - Project Engineer

1. Job Responsibilities

Project Engineers' responsibilities are the design, specification, and testing of instrumentation and control systems.

2. Education

A. Associate, Electrical Engineering Technology - The Pennsylvania State University - 1970.

B. Bachelor of Technology Electrical Design Engineering Technology - The Pennsylvania State University - 1975.

3. Nuclear Training

None

4. Nuclear Experience

Relay Technician; July, 1970 - November, 1972 - Maintenance and calibration of protective devices at Surry Nuclear Power Plant, Units 1 & 2.

Instrumentation & Control Technician; November, 1972 - December, 1973 - Preparation of protection system testing procedures for the Three Mile Island Nuclear Power Plant, Unit 1 and development of preliminary design criteria concerning separation of Class 1E circuits and preliminary system design for the Perry Nuclear Power Plant, Units 1 & 2.

Instrument & Control Engineer; September, 1975 - February, 1978 - Design, engineering, specification, and preparation of elementary wiring diagrams of instrumentation and controls for the Perry Nuclear Power Plant, Units 1 & 2.

5. Summary

1-1/2 years experience in the design of instrumentation and control systems for fossil-fueled generating plants.

Registered Professional Engineer in the States of Florida and Pennsylvania.

## TECHNICAL QUALIFICATIONS

Ms. Dawn L. Thompson - Engineering Technician  
Eastern Division Engineering

### 1. Job Responsibilities

Current job responsibilities do not involve application of nuclear theory. However, from 1976 to 1977 she was a Results Analyst with Environmental and Nuclear Services, assisting in reactor core physics testing, initial fuel load and analysis of chemistry data obtained from startup of CR-3.

### 2. Education

Bachelor of Arts in Mathematics, Vanderbilt University, Nashville, Tennessee - 1974.

### 3. Nuclear Training

She has studied Applied Nuclear Physics, Reactor Theory and Power Plant Technology at Bettis Reactor Engineering School, West Mifflin, Pennsylvania - 1974-1976.

In the Fall of 1977, she successfully completed an extensive six week training program in Chemistry, Radiochemistry, Health Physics, and Counting Room Laboratory jointly sponsored by Georgia Tech. Nuclear Research Center and Applied Physical Technology, Inc. of Atlanta, Georgia.

### 4. Nuclear Experience

1974 - 1976 - Designed and developed process for selection of fuel rods for the Light Water Breeder Reactor (LWBR) built by Bettis Atomic Power Laboratory, a Division of Westinghouse. Monitored all assembly aspects of LWBR as a Quality Assurance Engineer. Performed statistical operational review to reduce radiation exposure from assembly work of LWBR.

1976 - 1977 - Results Analyst, Environmental and Nuclear Services, Florida Power Corporation.

### 5. Summary

Ms. Dawn L. Thompson began employment with Florida Power Corporation on May 26, 1976. Prior to this and since college graduation, she worked for Westinghouse's Bettis Atomic Power Laboratory, West Mifflin, Pennsylvania as an Associate Engineer.

She has lectured frequently on the subject of nuclear power to various civic organizations, and is a member of the Florida Section of the American Nuclear Society.

## TECHNICAL QUALIFICATIONS

Mr. Daniel J. Tierney - Power Plant Chemist

1. Job Responsibilities

Directs and coordinates water management and chemical activity for a three unit oil-fired generating station. This position provides the direct supervision of water treatment to maintain the quality control/quality assurance of boiler water, steam and cooling water. In addition, this position controls other plant chemical activities, such as fireside chemistry, industrial safety and environmental monitoring.

2. Education

Bachelor of Science Degree in Chemical Engineering, University of Pittsburgh - 1973.

3. Nuclear Training

Introduction to nuclear power (NUS) - 1974.

4. Summary

Mr. D. J. Tierney graduated from the University of Pittsburgh in 1973 with a Bachelor's Degree in Chemical Engineering. In January 1974, Mr. Tierney joined Pennsylvania Electric Co. (GPU) in the position of Station Engineer II, supercritical steam plant. During this period, his experience included several areas of waste water treatment, attended various courses in industrial water treatment, and received a Pennsylvania Certification for Waste-Water Treatment.

Mr. Tierney joined FPC in May, 1978 as a power plant chemist.

## TECHNICAL QUALIFICATIONS

Mr. L. B. Tittle - Results Engineer

### 1. Job Responsibilities

The Results Engineer is responsible to the Performance Engineering Supervisor for the overall plant performance, specified testing involving surveillance requirements, and all other tests needed in increasing equipment and plant efficiency. He is responsible for periodic plant performance reports, annual report to NRC, documentation of all testing, and the coordination of major test efforts during outages with outside companies, interdepartmental personnel, and any other technical support groups necessary. He is also responsible for the development of a performance monitoring program designed to continually improve efficiency and lower operating and maintenance costs. He is also responsible for observing the rigid requirements of the Quality Assurance Program including the documentation required and the coordination with other inter-company Quality Assurance personnel.

### 2. Education

Bachelor of Science in Mechanical Engineering, University of Dayton - 1974.

### 3. Nuclear Training

He has had 8 months of nuclear operations training, attended a 2 week course on reactor engineering and 2 weeks on vibrational analysis.

### 4. Nuclear Experience

He has had a total of 4-1/2 years of nuclear experience including startup and testing, maintenance supervision and practical operating experiences. He has been closely involved in specialized surveillance for which this position is held responsible.

### 5. Summary

Mr. L. B. Tittle graduated from the University of Dayton in 1974 with a Bachelor of Science in Mechanical Engineering. Following a nuclear operations training program with General Electric Corp. at Knolls Atomic Power Laboratory, he joined Florida Power as a Plant Engineer in the Technical Support section of CR-3. In this capacity, he was closely involved in major maintenance projects, was a part of the startup testing team during initial plant startup and was responsible for resolving numerous performance related problems. In October of 1977, Mr. Tittle acquired the position of Results Engineer. Initially, the position had six plant engineers reporting to it. Subsequent organizational changes relieved this responsibility and an increased emphasis was placed on all other job responsibilities.

ETibbs(T.SpecLBT)D4

## TECHNICAL QUALIFICATIONS

Mr. James E. Triplett - Engineering Assistant, Distribution Engineering

### 1. Job Responsibilities

Design electric distribution facilities to provide service to residential, commercial and industrial customers in the Central division.

### 2. Education

Associate of Science Degree in Radiological Health Technology, Central Florida Junior College, Ocala, Florida - 1967  
Bachelor of Science Degree in Industrial Technology, University of West Florida, Pensacola, Florida - 1971.

### 3. Nuclear Training

Attended various in-plant training classes while working at Crystal River Unit #3.

Successfully attended class for Certification as Level II Visual and Leak Test Examiner - November 1977.

Successfully attended Nuclear Plant Training program in Chemistry, Radiochemistry, Health Physics, and Counting Room Technology at Applied Physical Technology, Inc., Atlanta, Georgia - October - December 1977.

Successfully attended 32 hours Advanced Industrial Brigade Training at State of Florida Fire College - February 1978.

### 4. Nuclear Experience

1967 - 1969. Radiological Health Monitor at New Port News Shipbuilding and Dry Dock Company.

1974 - 1978. Plant Engineer and Engineering Assistant at Crystal River Unit #3.

### 5. Summary

Mr. Triplett transferred to Crystal River Unit #3 in October of 1974. He worked on various projects including Nuclear Spare Parts, Nuclear Plant Reliability DATA (NPRD) System, and Reactor Coolant Pump Maintenance.

## TECHNICAL QUALIFICATIONS

Mr. Larry G. Turner - Production Engineering, Project Engineer,  
Fossil Engineering

1. Job Responsibilities

Project Engineer, Fossil Engineering, has the responsibility for engineering and design of power plant retrofit projects on an individual assignment basis. Cooperation with and assistance to other engineering disciplines is provided as required to meet Florida Power Corporation and Regulatory requirements.

2. Education

BSME - University of Florida, 1967

3. Nuclear Training

Principles of Nuclear Engineering course given by Florida Power Corporation Nuclear Engineer in 1969; including instruction and operation of training reactor at University of Florida.

4. Nuclear Experience

None

5. Other Experience

Florida Power Corporation: Nine (9) years experience in the testing, operation, design of steam power plants and gas turbine peaking units.

Three (3) years experience researching land titles for Alachua County Abstract Company.

## TECHNICAL QUALIFICATIONS

Mr. Stephen F. Ulm - Production Engineering, Project Engineer

1. Job Responsibilities

Perform and be responsible for electrical design engineering and/or engineering coordination for projects associated with the Nuclear Plant, Crystal River Unit #3. Provide engineering services to support other Nuclear Plant Activities such as licensing.

2. Education

BSEE - University of South Florida, 1974

3. Nuclear Training

"Nuclear Operations Quality Assurance" presented by Florida Power Corporation Quality Programs Department, February, 1978.

"Qualification of Safety-Related Equipment for Nuclear Power Generating Stations", presented by Drexel University and IEEE, October, 1978.

4. Nuclear Experience

Engineer: May, 1976 to January, 1977. Responsible to the Chief Electrical Engineer for electrical design and procurement for Crystal River Unit #3 Nuclear Plant.

Project Engineer: August, 1978 to Present. Responsible to the Manager, Nuclear Engineering for providing electrical engineering and design services for Crystal River Unit #3.

5. Other Experience

Engineer: August 1974 to May, 1976; and January, 1977 to November, 1977. Responsible to the Chief Electrical Engineer for electrical design and procurement for fossil projects (steam power plants and gas turbine peaking units).

Project Engineer: November, 1977 to August, 1978. Responsible to the Manager, Fossil Engineering for providing electrical engineering and design services for fossil projects (steam power plants and gas turbine peaking units).

Certified Engineer - Intern in the State of Florida

ETibbs (T.SpecSFU)D69

## TECHNICAL QUALIFICATIONS

Mr. Joseph V. Vattamattam - Production Engineering, Project Engineer

### 1. Job Responsibilities

Has responsibility for engineering work of structural nature; specifically it includes design work, preparation of engineering studies, processing of purchase requisitions, evaluation of vendor proposals, approval of vendor design and vendor drawings and site inspection as required by the Manager of Nuclear Engineering, for Crystal River Unit #3 Nuclear Plant.

### 2. Education

BSCE (Structural) - Marquette University, 1967  
BSC (Physics) - Madras University, 1958

### 3. Nuclear Experience

Florida Power Corporation: Project Engineer, March, 1978 to Present.  
Reporting to Manager, Nuclear Engineering, for assignments on Crystal River Unit #3, Nuclear Plant.

### 4. Other Experience

Eleven (11) years of structural design and construction supervision of power plants, chemical and industrial plants, and commercial institutional buildings while employed in several consulting engineering firms and construction firms.

Four (4) years of teaching Physics for first year college students.

One (1) year Nuclear Physics research program at Marquette University, financed by National Science Foundation.

Registered Professional Engineer in the State of Florida.



## TECHNICAL QUALIFICATIONS

Mr. K. O. Vogel - Operations Superintendent - Crystal River Units 4 & 5

1. Job Responsibilities

The primary function of this position is to supervise the operation, including coal handling, of two 665 MW coal fired units.

2. Education

Bachelor of Science in Electrical Engineering, University of Florida, 1967.

3. Nuclear Training

Mr. Vogel has attended an NRC Reactor Operator Hot License Class at Crystal River Unit 3 and received a Senior Reactor Operator's License. This license is still current.

4. Nuclear Experience

1969-1972 Control Design Engineer for Crystal River Unit 3 Nuclear Plant.

1972-1974 Supervisor of start-up testing activities for Crystal River Unit 3 Nuclear Plant.

1974-1978 Computer and Controls Engineer for Crystal River Unit 3 Nuclear Plant.

1978-1979 Operating Engineer for Crystal River Unit 3 Nuclear Plant.

5. Summary

Mrs. K. O. Vogel graduated from the University of Florida 1967 with a B.S. Degree in Electrical Engineering. Mr. Vogel's employment began with Florida Power Corporation in January, 1968 when he was enrolled in an eight-month training program. This program allowed him to learn about various departments in the company. In September, 1968 he began working as an Associate Engineer in the Results Section of the Production Department. In this capacity he tested and evaluated the performance of the large steam generating units. He also conducted special projects in the areas of control systems and boiler flame detection systems. In January, 1969 Mr. Vogel was temporarily assigned to the Generation Engineering Department. While in this department he assisted in the initial start-up of Crystal River Unit 2. He helped design the Crystal River Unit 3 control boards and the control room layout. He defined and programmed the on-line computer monitoring system for Crystal River Unit 3. In November, 1971, Mr. Vogel was assigned to the Generation Testing Department. He supervised the writing of instrument calibration procedures and wrote test procedures for Crystal River Unit 3. In September, 1974 Mr. Vogel was assigned to supervise the development of all Crystal River

Mr. K. O. Vogel (Cont'd)

Unit 3 start-up testing procedures. In June, 1975 Mr. Vogel returned to the Production Department as Computer & Controls Engineer for Crystal River Unit 3. In January, 1978, Mr. Vogel assumed the duties of Shift Supervisor for Crystal River Unit 3. In April, 1978, Mr. Vogel was promoted to Operating Engineer for Crystal River Unit 3. In June, 1979, Mr. Vogel was promoted to Operations Superintendent for Crystal River Units 4 & 5.

ET1bbs(Vogel)D83

456 212

## TECHNICAL QUALIFICATIONS

Dr. D. K. Voigts - Manager, Environmental Affairs Section  
Environmental and Licensing Affairs Department

### 1. Job Responsibilities

The functions of this position are to (1) initiate, coordinate and manage environmentally oriented research programs required in licensing proceeding, and (2) interpret and report the results of these programs. The results of the research programs are used to establish the environmental impact of both nuclear and fossil fueled power plants. In addition, this position must maintain communications with the general scientific community and the scientists in the state and federal regulatory agencies.

### 2. Education

Bachelor of Arts in Biology, Wartburg College, Waverly, Iowa - 1964.

National Science Foundation Institute, College of Guam, Agana, Guam - 1966.

Master of Science in Zoology (Ecology), Iowa State University, Ames, Iowa - 1970.

Doctor of Philosophy in Zoology (Ecology), Iowa State University, Ames, Iowa - 1973.

### 3. Relevant Experience

1974 - 1976 - Manager, Ecological Sciences Department, Greiner Engineering Sciences, Inc. Responsibilities included developing plans of study, conducting ecological field studies, and subsequently preparing impact assessment reports.

1973 - 1974 - Acting Aquatic Ecology Group Leader, Texas Instruments. This position involved directing an intensive aquatic sampling program at three proposed power plant sites on the Hudson River.

## TECHNICAL QUALIFICATIONS

Mr. T. H. Wayble - Nuclear Shift Supervisor

1. Job Responsibilities

Responsible to the Operations Superintendent to plan, supervise and coordinate the duties and training of operating personnel assigned to his shift.

Serves as an advisory consulting capacity as regards to plant operations.

Is responsible for all operating activities and is the sole authority at the plant when immediate supervisors are not present.

2. Education

High School Graduate, Georgia Military College, Milledgeville, Ga. - 1950.

3. Nuclear Training

He has had a total of 73 weeks (1.4 years) of classroom training, including phase 1, 2, 3, 4, 5 and 6 as stated in FSAR Section 12.2.

4. Nuclear Experience

He has had a total of 8 years of nuclear experience including engineering and design supervision, startup and testing, initial core fueling, defueling, refueling, and practical operating experience in both normal and abnormal conditions.

5. Summary

Mr. Wayble started in the Production Department of Florida Power Corporation in August of 1958 as a Plant Helper at the Bayboro Plant. He progressed through all operating classifications to switchboard operator at Bayboro Plant. In his career with Florida Power Corporation, he has worked at the A.W. Higgins Plant, P.L. Bartow Plant, and Bayboro Plant. He was involved in the initial startup of the P.L. Bartow Unit #3.

Mr. Wayble transferred to Crystal River Unit #3 as Control Center Operator in January, 1971. He was promoted to Chief Nuclear Operator in January, 1973 and to Shift Supervisor in August, 1974. At the time of Crystal River Unit #3 initial core loading, he had 17 years of power plant experience and satisfactorily completed an NRC approved training program. This program utilizes a complete and accurate nuclear power plant simulator. He has taken and passed an NRC examination for Senior Reactor Operator License and has held license SOP-2798 since August of 1976.

## TECHNICAL QUALIFICATIONS

Mr. Steven Watsey - Manager, Power Plant Stores

1. Job Responsibilities

Define, develop and implement policies and procedures for all power plant storerooms including CR-3.

2. Education

Bachelor of Science, Engineering, U.S. Military Academy, West Point, N.Y. - 1951.

3. Nuclear Training

None

4. Nuclear Experience

None

5. Summary

Employed by Florida Power Corporation October 3, 1977 as Manager, Power Plant Inventory Control. Responsibilities included addition of nuclear parts to the MMIS and development of CR-3 computerized catalog. Promoted to Manager, Power Plant Stores April, 1979. Prior experience includes transmission engineering for three years with Florida Power & Light Co. He was a manufacturer's representative for 18 years and successfully sold cable, cable tray, annunciators, alarm devices, sequential operations recorders, uninterruptible power supply systems and other apparatus ultimately used in nuclear power plant applications.

## TECHNICAL QUALIFICATIONS

Mr. E. E. Welch - Computer and Controls Engineer

### 1. Job Responsibilities

The Computer and Controls Engineer is responsible to the Performance Engineer for developing and maintaining all on-line and off-line computer programs, all special programming needs of other plant supervisors, and the direction of both on-line and off-line computer time usage. He is responsible for maintaining and insuring the accuracy of the highly important Nuclear Steam Supply Calculations, and Performance Calculations on the plant process computer. These programs provide rod position information, fuel burn-up rates, and plant heat balance data to support the Core Analysis, Reactor, and Results Engineers and insure optimum plant efficiency. The Computer and Controls Engineer will also be responsible for coordinating with engineering to accomplish replacement of the present plant computer with a unit compatible with existing multiplexer and I/O equipment, and capable of performing all existing software routines. He is also responsible for the control engineering associated with the integrated control system, reactor protection system, engineering safeguards, and all other control systems, including all interlocks, logic and needed design alterations.

### 2. Education

Bachelor of Science in Electrical Engineering, Clarkson College of Technology, Potsdam, New York - 1972.

Digital Electronics Course, Central Florida Community College - January, 1979.

### 3. Nuclear Training

He has a total of 8 weeks of plant systems training.

### 4. Nuclear Experience

Total of 4.8 years of nuclear experience, including design, design supervision and testing.

### 5. Summary

Mr. E. E. Welch, Nuclear Computer and Controls Engineer, graduated from Clarkson College of Technology in 1972 with a B.S. degree in Electrical Engineering. He worked as a design and electrical test engineer for Newport News Shipbuilding and Dry Dock Company from 1972 to 1976, on the Nimitz class nuclear-powered aircraft carrier project.

Mr. E. E. Welch (Cont'd)

5. Summary (Cont'd)

In this capacity, he was responsible for design work on the Primary Plant Instrumentation System and testing/troubleshooting on all reactor plant instrumentation and control systems.

From 1976 to 1978, he was employed by the Tennessee Valley Authority as a design engineer, developing electrical wiring design details for modifications and additions for fossil fired steam plants. He was employed with Florida Power Corporation, at Crystal River Unit 3, in September 1978 as a Plant Engineer, assigned to assist the Nuclear Computer and Controls Engineer. In March 1979, he filled the position of Computer and Controls Engineer.

## TECHNICAL QUALIFICATIONS

Mr. George Heber Weller III - Telecommunications Engineer

### 1. Job Responsibilities

Design, purchase and coordinate the installation of microwave system additions and modifications, mobile radio system additions and modifications and other communications oriented projects.

### 2. Education

- a. Bachelor of Science in Electrical Engineering, University of Florida, Gainesville, Florida, 1970.
- b. Federal Communications Commission Second Class Radio Telephone Operator License, May 1974.
- c. State of Florida Professional Engineers Registration
- d. Various technical courses including:
  - 1) Austin Communications Education Services course entitled "Basic Transmission Concepts"
  - 2) The George Washington University continuing engineering education program course entitled "Modern Data Communications".

### 3. Nuclear Training

No formal Nuclear training at this time.

### 4. Nuclear Experience

No engineering experience associated with the Nuclear Engineering field.

### 5. Summary

Mr. George Heber Weller, Telecommunications Engineer, began employment with Florida Power Corporation in July, 1976. Prior to this he worked as a Communications Engineer for the Jacksonville Electric Authority from 1972 to 1976. Additionally he worked as an Electronics Engineer for the Federal Communications Commission from 1971 to 1972.

During these various job associations, he has been involved with various types of communication system design and their implementation. His responsibility to the CR #3 Offsite Radiological Support Team is solely related to communications type activities and as such he is sufficiently qualified to provide any assistance that may be required.

ETibbs(T.SpecGHW)D1



## TECHNICAL QUALIFICATIONS

Mr. Daniel W. West - Bartow Plant Manager

### 1. Job Responsibilities

Responsible to the Manager, Fossil Operations, for the safe, efficient and reliable operation of a three-unit, 448 MW steam generating plant, in accordance with established corporate, environmental, electrical industry and regulatory safety requirements. Provides operations and maintenance personnel as required to support the System Fuel and Gas Turbine facilities.

### 2. Education

Bachelor Mechanical Engineering, University of Florida - 1960.

Post-Graduate courses (11 credit hours) at Georgia Institute of Technology - 1969-1970:

Basic Radiological Health  
Principles of Nuclear Physics  
Radiation Detection

### 3. Nuclear Training

Mr. West has had the following classroom and/or on-the-job training:

Nuclear Technology Indoctrination (B&W, one week) - 1967.

Introduction to Nuclear Engineering (FPC, two weeks) - 1969.

Health Physics, Radiochemistry Training, Georgia Tech Research Reactor (26 weeks) - 1969-1970.

Connecticut Yankee Observation/OJT/Training in Health Physics (ten weeks) - 1971.

Design Training (B&W, six weeks) - 1972.

Radiation Protection Guides and Dose Assessment (EPA), Montgomery, AL (two weeks) - 1972.

Occupational Radiation Protection (EPA, Montgomery, AL (two weeks) - 1972.

Radiological Analysis by Gamma Spectroscopy (EPA), Montgomery, AL (two weeks) - 1972.

3. Nuclear Training (Cont'd)

Management of Radiation Accidents (EPA), St. Petersburg, FL (one week) - 1972.

Systems Training (FPC, B&W, fifteen weeks) - 1972-1973.

4. Nuclear Experience

From August, 1969 to November, 1974 (5.2 years), Mr. West served in the capacity of Chemistry and Radiation Protection Engineer at Crystal River Unit 3. Following six months training at Georgia Tech, Mr. West was responsible for:

- A. Selection and training of subordinates in chemistry, radiochemistry and radiation protection.
- B. Design review of CR-3 facility and recommend changes where appropriate through practical knowledge gained during visits at other operating facilities.
- C. Procurement of all chemistry, radio-chemistry and Health Physics equipment including instrumentation, portable and fixed, protective clothing, and radiation monitoring system.
- D. Development of Emergency Plan where he coordinated directly with off-site support groups including the Florida Department of Health and Rehabilitative Services.
- E. Development and initiation of Crystal River 3 Radiation Protection Manual.
- F. Development of all Radiation Protection, Chemistry and Radio-Chemistry procedures.

5. Summary

Mr. West graduated from the University of Florida in 1960 with a Bachelor of Mechanical Engineering Degree. Following graduation, he worked in the plastics, aerospace and engineering consulting fields.

In 1964, Mr. West was employed by the Florida Power Corporation. Following the initial assignment of Assistant Production Engineer, he progressed to Plant Engineer at the Bartow and Crystal River Fossil Plants and later became Results Engineer at the Crystal River Fossil Plant. As Plant Engineer, he assisted in evaluating plant operations and maintenance relating to plant efficiency, chemistry, and design

5. Summary (Cont'd)

modifications. As Results Engineer, he was responsible for performance testing and fuel inventories for the 420 MW generating unit, and supervised two Plant Engineers and the Instrument Department.

In August, 1969, Mr. west was promoted to Chemistry and Radiation Protection Engineer, and was responsible for the manning and training of all subordinates, and the development and initiation of all chemistry and radiation protection procedures, per ANSI, NRC and other regulatory guidelines.

In November of 1974, he was promoted to his present position as Plant Manager at the Paul L. Bartow generating facility in St. Petersburg.

Mr. West is a Registered Engineer in the State of Florida, a member of the American Society for Mechanical Engineers, and past member of the Health Physics Society.

## TECHNICAL QUALIFICATIONS

Mr. G. R. Westafer Maintenance Superintendent - Nuclear

### 1. Job Responsibilities

The Plant Maintenance Superintendent is responsible to the Plant Manager for plant wide mechanical, electrical, and instrumentational maintenance. He is responsible for the planning, scheduling, and coordination of electrical, mechanical, instrumental and staff support personnel. He schedules and develops the required maintenance and preventive maintenance programs through the coordination of information supplied by all plant supervisors. He organizes and directs maintenance personnel in all activities connected with loading and unloading the reactor core. He is responsible for assuring plant maintenance conforms to the plant Inservice Inspection Programs and other applicable codes and specifications. He recommends the selection of outside contractors and consultants for specialized maintenance requirements relative to existing plant equipment and new equipment installations. The operating license and safe operation of the plant will be directly affected by his decisions and judgment relative to the plant's structures, systems, and components. He must be available for emergency call-out and have knowledge of all supervisor positions to insure organizational flexibility.

### 2. Education

Bachelor of Mechanical Engineering, University of Florida - 1964  
Bachelor of Nuclear Engineering Sciences, University of Florida - 1969.

### 3. Nuclear Training

He has had a total of three (3) years of classroom training, including Phases 1, 2, 3, 4, 6 and 7 as stated in Section 12.2.

### 4. Nuclear Experience

He has had a total of nine (9) years of nuclear experience, including design supervision, startup and testing, and practical operating experience but not including his training time.

### 5. Summary

Mr. G. R. Westafer, Maintenance Superintendent, graduated from the University of Florida in 1964 with a Bachelor of Science Degree in Mechanical Engineering and in 1969 with a Bachelor of Nuclear Engineering Sciences Degree. He is also a registered Professional Engineer in the State of Florida. Since January 1965, he has served in the Production Department of Florida Power Corporation. Starting with the position of Associate Engineer, he advanced to the position of engineer in the Results Section, then to Technical Support Engineer. As an engineer in the Results Section, then to Technical Support Engineer. As an engineer in the Results Section, he helped develop a system-wide program for the test and monitoring of the performance of all of the generating units in the Company. This included the preparation of Test Procedures and manuals for the continuing monitoring of plant performance.

He worked on such major projects as air pollution testing and control, testing of all system turbine generator and boiler equipment, and various economic and instrumentation and control projects. He has also participated in the startup of Crystal River Unit 1 and did the initial development of the performance calculations of Crystal River Unit 2. As Technical Support Engineer, he has been assigned to the Power Engineering Department in the area of instrumentation and control of the Nuclear Plant. His work involved supervising the writing of all Hot Functional and Power Test Procedures for startup of Crystal River Unit 3, instructor in Nuclear Academic Training, working on the control systems during unit startup testing, and participation in the development of the plant Technical Specifications. He is also a member of the American Nuclear Society. In 1978 he was promoted to Maintenance Superintendent.

## TECHNICAL QUALIFICATIONS

Mr. Rolf C. Widell - Production Engineering, Project Engineer

1. Job Responsibilities

The Project Engineer, Nuclear Engineering, has the responsibility for engineering and coordination of all phases of projects involving changes and modifications to the Nuclear Plant facility. Responsible to the Manager, Nuclear Engineering.

2. Education

BSME - Lowell Technological Institute, Lowell, Massachusetts, 1973.

3. Nuclear Training

"Radioactive Waste Management for Nuclear Power Reactors", short course sponsored by the ASME and the University of Virginia, May, 1979.

4. Nuclear Experience

General Dynamics/Electric Boat Division: Project Engineer, June, 1973 - December, 1974. Specification and evaluation of proposals for nuclear equipment and components for a naval nuclear prototype. Shift Fueling Engineering, January, 1975 - February, 1976. Responsible to the chief fueling engineer for the overall reactor core load activities at a naval nuclear prototype. Engineering Group Leader: March, 1976 - March, 1977. Responsible to the Engineering Manager for the activities of the Mechanical and General Engineering Group, during the addition of safety-related systems to the Shippingport Atomic Power Station for the LWBR upgrade program. Senior Engineer: April 1, 1977 - August, 1978. Responsible to the Engineering Manager for the design and analysis of safety related piping supports. Also performed as a shift fueling engineer during the reactor power unit installation at a naval nuclear prototype.

Florida Power Corporation: Project Engineer: September, 1978 - Present. Responsible to the Manager, Nuclear Engineering, for safety-related modifications to the Nuclear Plant, Crystal River Unit #3, for assigned projects.

5. Other Experience

Five (5) years experience with General Dynamics and one (1) year experience in the design and construction of nuclear plant secondary systems.

Registered Professional Engineer in the States of Florida and New York.

E.Tibbs (T.SpecRCW)D69

## TECHNICAL QUALIFICATIONS

Robert H. Williamson, Jr. - Financial Manager, Generation Projects

### 1. Job Responsibilities

The primary functions of this staff position are to provide sufficient, adequately trained personnel for the construction projects' control functions - cost, schedule and accounting. Assure adequate cost, schedule and accounting systems are in place to provide necessary internal financial and management controls.

### 2. Education

B.S. in Business Administration - Accounting Major, Louisiana Tech University, Ruston, Louisiana, 1964. Have attended seminars in management, auditing, computer auditing, project management, technical report writing and public speaking.

### 3. Nuclear Experience

None

#### Other

April, 1976 - October, 1978 (prior to present position) - Manager of Operational Auditing, Florida Power Corporation

Recruited and supervised a staff of five operational and EDP auditors. Activities included planning audit schedules, reviewing audit programs, review of auditors' workpapers and reports. Developed plans for staff.

Prior to Florida Power - Twelve (12) years controllership, accounting and audit experience with various companies. Career emphasis on systems, procedures and management information.

Certified Public Accountant, Certified Internal Auditor

## TECHNICAL QUALIFICATIONS

Mr. John R. Wright - Chemistry Radiation Protection Engineer

### 1. Job Responsibilities

The Chemistry and Radiation Protection Engineer is responsible for the overall development, implementation and administration of all Chemistry, Radiochemistry, Radioactive Waste Process and Radiation Protection Programs.

He reports to the Technical Support Superintendent, however, he has organizational freedom to seek whatever management level necessary to implement Radiological Safety Requirements and is on call to provide support to management on matters of Radiological Safety and Chemistry during on and off standard occurrences.

### 2. Education

Mr. Wright is a High School Graduate. He entered Special Training program in the early 1950's as the Science of Health Physics was being developed, attending special courses at Hanford School of Engineering studying Chemistry, Physics, Radiation Measurement, Instrument Interpretation and Radiobiology. Additionally, he was adjunct lecturer at Georgia Institute of Technology, School of Nuclear Engineering, in NE-640 Radiation Protection, CE-682 Basic Radiological Health, NE-610 Radiation Detection, NE-740 Radiation Dosimetry, and NE-741 Radiation Physics. Throughout his career he has attended and participated in numerous State-of-the-Art Seminars related to Radiological Health Science.

### 3. Nuclear Training

Mr. Wright completed many specialized Radiological Health instruction programs at Hanford Atomic Products Operations including the Radiation Monitoring Unit Training Program for 1 year. This included formal classroom as well as on-the-job training and included environmental surveillance as well as Applied Health Physics.

### 4. Nuclear Experience

Mr. Wright is a professional Health Physicist with twenty-five years of diversified experience involving establishing Radiation Protection Programs, consulting, teaching, training, and supervising professionals and technical personnel.



5. Summary

During his career, Mr. Wright's radiological responsibilities have been associated with Hanford production reactors, chemical separation processes, 10 MW air shielded radiation effects reactor, 70 MW power reactor for the N.S. Savannah, 1 MW research reactor, low power mobile training reactor, AGN 201 type reactor, several critical and sub-critical assemblies. Other assignments included Cronkcroft-Walton neutron generators, Van de Graaf accelerators, Hot cell complexes dealing with megaCurie quantities of  $^{60}\text{Co}$ ,  $^{252}\text{Cf}$  source, PuBe neutron sources, radiopharmaceuticals production and applications, and was associated with a wide variety of animal experiments and medical applications. In addition, he was an advisor to graduate students in the area of Applied Health Physics at George Institute of Technology.

Mr. Wright's contributions to the field of radiation protection includes the following reports, publications, and commendations:

1. "A Proportional Continuous River Water and Stream Sampler at Georgia Nuclear Laboratory 1960, Health Physics Journal, J. R. Wright, et al.
2. "Health Physics Procedures Manual for Maintenance, Repair, Refueling and Waste Handling of the N.S. Savannah", 1962, J. R. Wright, et al.
3. "The Radiation Leakage Survey of the Shield of the Nuclear Ship Savannah" 1962, ORNL. (Listed as contribution)
4. "The Use of Throw Away Cartridges to Contain Tritium Released in Neutron Generators" 1968, USAEC Division of Technical Information CONF-680411, J. R. Wright, et al. (Patent applied for.)
5. "A High Energy Beta Bremsstrahlung Shield for Stirring Cells which Provide Visual Inspection of Colloidal Radiopharmaceutical Materials while Therapy Doses for Patients are Administered", Piedmont Hospital, First Research Center Archives, 1970. J. R. Wright
6. Numerous unpublished academic papers dealing with Radiation Detection and Measurement.
7. Commendation from USAEC Operations Office at Hanford for work involving off-site emergency operations (1956).
8. Selected for "Personalities of the South" publication (1974).
9. Biographical Subject in "Who's Who in the South and Southwest".

Mr. John R. Wright (Cont'd)

10. Mr. Wright is a member of the National Health Physics Society and the International Radiation Protection Association.
11. Advisor to Central Florida Community College School of Radiological Health Technology.
12. Member of Governor's Central Florida Energy Council.

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Agee, J. W.	EE					11				
Alberdi, J.	ME			7.0	?	21	X			X
Allegood, R. L.	ME					23				
Allen, H. L.	ME			1		9-1/2				
Allen, L. E.	ME			4		4				
Averett, M. W.	NS	NE		10		10				
Bairagdar, M. M.	ME					1		X		
Baker, J. A.	Special Ed.			5		5				
Baker, K. B.	EE									
Baker, T. L.										
Ball, A. M.	E					9				
Barbour, C. G.				6		6				
Barrett, J. E.	ME			6		6			X	X
Baumgardner, J. S.	EE			1		5				
Baynard, P. Y.	Chem. & Math	Bus. Adm.	Nuclear Chem.	6		6	X	X		X
Beatty, Jr., G. P.	ME			13	4	21	X		X	X
Becker, G. A.	ME			6		1				

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Bennet, C. A.										X
Bingham, T. R.	Business									
Black, D. B.	Indus- trial			7		7				
Boldt, G. L.	E			11		6			X	
Bonner, R. C.	EE			9	2	11				X
Borgerson, R. K.										X
Bourne, T. A.	Account- ing							X		
Breaux, P. L.				9		29			X	X
Breedlove, P. D.										X
Bright, R. M.	NE			8		8		X		X
Brilli, G.				11		11		X		
Brosche, III, L. A.	ME			2		5				
Brown, Jr., W. J.										
Buckner, J. L.										X
Buell, D. T.	ME					9				
Burns, Jr., R. S.	ME	E		6	4	21				
Campbell, D. L.	CE			8		8				

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Cannon, H. I.										
Carr, R. E.										
Carter, R. P.	Manage- ment				6	3				
Cason, J. A.				3-1/2		27				
Clapp, J. C.	Archi- tecture			6		6				
Clark, B. W.										X
Clardy, J. B.	Chemistry			12	1	22	X			
Clear, C. L.										X
Clauson, R. E.	ME			18		4				X
Class, R. J.	Business			4		6				
Colby, J. E.	E			9		9				
Collins, M. E.	NE			4-1/2		4-1/2			X	X
Cooper, J.				9		9			X	X
Crane, B. E.	ME			9-1/2		9-1/2			X	X
Crockett, D. C.	E			-		13				
Cronin, J. F.										
Cross, W. A.	NE			7		5			X	X

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Dagostino, P.	EE			7		5				
Dawson, J. E.	ME			4	5	21				
Dean, P. E.	BA			-		-				
Dorrie, R. S.	Construc- tion			7		9				
Doyel, C. B.										
DuBois, Q. B.	NS Physics	NE		10	6	9	X			X
Dudley, W. E.										
Dumas, Jr., H. E.										
Elder, K. M.	ASE	ME		2		4				
Embach, H. M.				9		29			X	X
Evertz, III, H. A.	Business					17	X			
Farless, D. M.				7-1/2		22			X	
Feldhusen, R. L.				-		5		X		
Fergusson, D. E.	EE					5-1/2				
Flynn, D. I.					10	22				
Foley, M. B.	E	Business			?	12				
Forte, C. M.	ME					3				

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Fraze, L. O.	ME	ME		6		9				
Freitag, J. D.	Engr. Admin.	Business			?	1/2		X		
Friend, A. E.	EE			10		12				X
Fuller, R. E.										X
Froats, E. E.	CE			11	7	16				
Garrison, G. N.						31				
Gates, R. W.						21				
Goering, C. G.										X
Golden, W. L.								X		
Gomez, A. L.	EE			20		22				
Good, E. M.	EE			13		15				
Griffith, P. E.				17		11			X	X
Hancock, J. A.	Physics	NE		16		12	X	X		
Harrison, J. L.	Architec- ture		Biochem.	5		5			X	X
Hebb, G. P.				15		15			X	X
Hebb, Jr., M. F.	BEE				?	21				
Hedlund, R. C.						22				

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Henry, P. C.	EE	E		7		20				
Henson, M. C.						4			X	
Herbert, W. H.										X
Herring, R. A.				2						X
Hicks, J. C.	Metal- lurgy ME					5-1/2	X			
Higgins, M. E.						5				
Hines, Jr., A. H.	ME				?	28				
Hockett, Jr., O. H.	CE					17				
Hubbs, Jr., J. C.	NE EE			16		15	X			
Holt, J. E.	EE					1				
Horton, C. O.						28				
Hudson, F. O.						35		X		
Hurley, L. D.	ME							X		
Jackson, E. C.						21				
Johnson, S. W.	ME			12		8			X	
Johnson, W. C.				4						
Karrh, C. J.				4		6				



Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Katterhenry, A. A.	EE	NE		19		19	X			
Kelley, L. C.				13		3				X
Kemper, W. E.				12		6				X
Keppeler, J. G.	ME					8			X	
Klein, W. R.	EE	NE		11		11				X
Kleinman, M. H.							X			
Kraiker, J. R.				8-1/2		21			X	X
Kulik, J.	EE					3				
LaBorde, D. J.	EE			-		7				
Leigh, A. B.	ME			2	?	27				
Lucas, H. B.				9		14			X	X
Lucas, I. B.										
Lutkehaus, T. C.	EE			9		16-1/2			X	
McClure, III, J. A.										
McGee, J. A.								X		
McKee, P. F.	NE ME			11		15			X	X
McLaughlin, R. L.	Physics			7		7				X

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Mack, J. E.	CE			5		6			X	
Maloney, J. V.	ME	Business			?	8				
Marshall, B. J.	EE					38				
Marshall, G. W.										
Mathew, M. W.										X
May, W. O.										
Megahan, F. N.	Chemistry			16		17				
Miller, M. S.	Chemistry					5				
Miller, T. A.				19		6			X	X
Miller, T. S.										
Montemayor, R.				4	2	26				
Moore, G. C.	IE	E			8	22				
Morea, E. M.	ME			3		3				
Morneault, A. W.	EE			9		12				
Morrison, Jr., D. A.				16		16				X
Mount, T. N.										X
Neiser, R. W.	Law				1	13				

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Nelson, A. T.				19		21			X	
Nichols, W. R.				5		7				
Nisula, W. W.	CF									
Nusbickel, Jr., D. C.	EE			10	2	10				
O'Brien, W. S.	ME NE			5		16				X
Obmann, R. G.	Math					14				X
Odom, R. E.										
Ohanian, M. J.							X			
Olson, D. D.										
Ormston, A. J.	ME				15	40				X
O'Shea, D. M.										
Pachos, C.	CE			11		24				X
Padilla, A. A.	ME			1		4				
Parker, J. L.	High School Forestry ME							X		
Parnelle, Jr., R. E.				4		10				X
Parrish, J. J.										
Pedrick, IV, D. W.	X			5						X

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Perkins, G. D.				11		17			X	X
Perrey, H. M.				13		2				
Peterson, N. A.	E					3-1/2				
Peyinghaus, R. R.								X		
Pittman, W. C.				6		11			X	
Pluebell, F. W.				7		21			X	X
Pope, C. R.										
Porter, D. E.	EE			5		10				X
Reeder, H. E.				9		31			X	X
Reilly, III, W. P.	EE					7				
Richmond, D. W.										
Robinson, Jr., M.										X
Rogers, R. E.										
Rottloff, R. H.	E			7		7				
Rowland, D. J.	ME			18	?	18				
Ruppel, J. G.	EE			1		6				
Ruszala, G. H.				15	12	15			X	

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Schmiedel, R. P.	E			2		6				
Shook, D. A.	EE			9		12	X			
Simpson, E. C.								X		X
Smith, R. H.	ASEE			15		13				
Smith, T. L.	BA-Mass Comm.					6		X		
Snipes, C. R.										
Spake, N. B.	IE			5	?	23				
Stanbrough, S. L.						12-1/2				
Stewart, W. P.										
Stocky, D. G	EE					29				
Sudduth, N. L.						20				
Sullivan, W. J.	Business					17		X		
Swyers, W. A.	ME					10				
Szelistowski, W. A.										
Takami, R. S	ME					6				
Taylor, B. A.	EE			6		6				
Thompson, D. L.	Math			5		3				X

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Tierney, D. J.	Chem. E					5				
Tittle, L. B.	ME			4-1/2		5			X	X
Triplett, T. E.	Indus- trial			7		5				X
Turner, L. G.	ME					9				
Ulm, S. F.	EE			3		5				
Vattamattam, J. V.	CE			1		11				
Vogt, A. P.										X
Vogel, K. O.	EE			5		11				X
Voigts, D. K.	Biology	Zoology	Zoology			1	X			
Ward, W. D.								X		
Wareham, J. G.										
Watsey, S.	E					22				
Watts, Jr., W. R.										
Wayble, T. H.				8		21			X	X
Welch, E. E.	EE			5		3			X	
Weller, III, G. H.	EE					7		X		
West, D. W.	ME			5	5	15				

Table I

Name	BS	MS	PhD	Nuclear Exper.	Mgmt. Exper.	Utility Exper.	NGRC	ORS	Plant Staff	ETO
Westafer, G. R.	ME NE			9		9			X	X
Widell, R. C.	ME			6		1				
Williams, G. M.										X
Williamson, R. H.	Business				?	2				
Wright, J. R.				25		25			X	

456 241

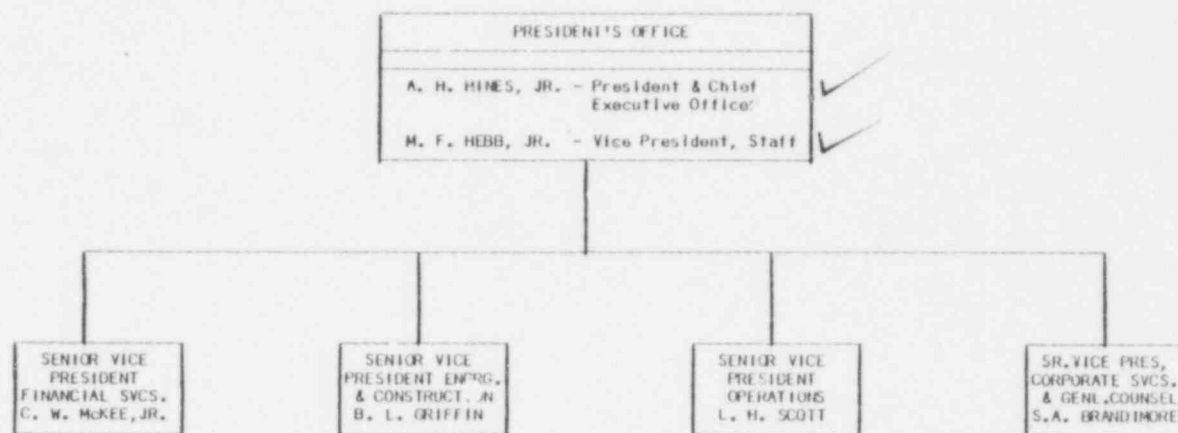
POOR ORIGINAL



Florida  
Power  
INCORPORATED

June, 1979

President and  
Staff



456 242

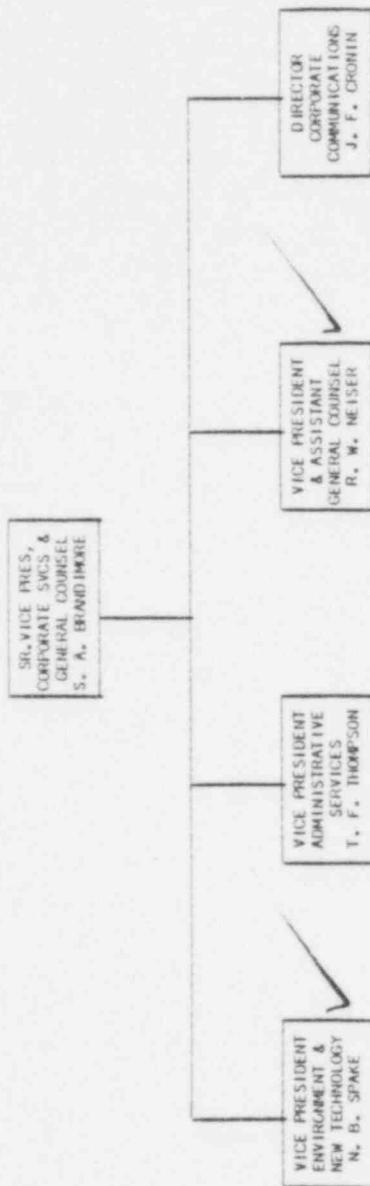


June, 1979  
Chart A



Florida  
Power

Corporate  
Services  
(Staff)



POOR ORIGINAL

June, 1979  
Chart A-1



Legal, Environ-  
ment & New  
Technology and  
Communications

Sr. Vice Pres.  
Corporate Svcs.  
& Genl. Counsel  
S.A. Broadmore

Vice President  
Environment &  
New Technology  
N. B. Spake

Vice President  
& Assistant  
General Counsel  
R. W. Neiser

Director  
Corporate  
Communications  
J. F. Cronin

Senior Counsel  
H. A. Evertz III

Corporate  
Counsel  
J. A. McGee

Advanced Energy  
Systems  
Engineer  
L. A. Rodriguez

Director  
Quality  
Programs  
Q. B. Davis

Director, Environ-  
ment & Licensing  
Affairs  
W. S. O'Brien

Director  
Real Estate  
T. C. Weaver

Director  
Public Affairs  
R. L. Strong

Director  
Public  
Information  
W. C. Johnson

Claims Manager  
W. R. Nickse

Assistant  
Counsel  
J. H. Richardson

Assistant  
Counsel  
B. W. Clark

Manager  
Quality Program  
Audits  
J. C. Clapp

Manager  
Environmental  
Affairs  
D. K. Voigts

Manager  
Acquisition  
C. R. Bell

Public Affairs  
Representative  
(Tallahassee)  
H. H. Williams

Public  
Information  
Officer  
I. B. Lucas

Claims Agent  
P. L. Anderson

Manager Quality  
& Reliability  
Engineering  
E. E. Frouts

Supervisor  
Surveillance  
Affairs  
A. W. Moreault

Property  
Manager  
R. Solaries

Manager Creative  
Services  
B. N. Norberg

Supervisor  
Graphic Arts  
Center  
H. A. Thompson

Supervisor  
Quality  
Programs  
J. C. Hicks

Manager  
Environmental  
Operations  
R. E. Parnelle, Jr.

Manager  
Litigation & Joint  
Use Affairs  
G. E. Clayton

Manager  
Licensing  
Affairs  
W. W. Vierday

Manager  
Licensing  
Affairs  
W. W. Vierday

POOR ORIGINAL

June, 1979  
Chart A-2



Administrative  
Services

VICE PRESIDENT  
ADMINISTRATIVE  
SERVICES  
T. F. THOMPSON

DIRECTOR OF  
PERSONNEL  
M. F. FLEMING

DIRECTOR  
FUEL & SPECIAL  
PROJECTS  
D. J. ROWLAND

DIRECTOR  
SAFETY &  
SECURITY  
D. W. RICHMOND

DIRECTOR  
PURCHASING &  
STORES  
J. V. MALONEY

BUILDING  
MANAGER  
G. J. McWILLIAMS  
(TEMP. ASSIGN.)

MEDICAL  
DIRECTOR  
H. W. CARTER, M.D.

PROJECT MANAGER  
R. L. REED  
(TEMP. ASSIGN.)

SENIOR FUEL  
ENGINEER  
P. DAGOSTINO

SAFETY  
SUPERVISOR  
J. G. WAREHAM

MANAGER  
TRANSMISSION &  
DISTRIBUTION MATERIALS  
(VACANT)

SUPERVISOR  
PURCHASING  
SERVICES  
J. W. PIATT

MANAGER  
POWER PLANT  
MATERIALS  
W. R. WATTS, JR.

SUPERVISOR  
OFFICE SERVICES  
P. A. MAGUIRAN

MANAGER  
LABOR RELATIONS  
R. L. IRWIN

MANAGER  
EMPLOYEE  
RELATIONS  
M. R. MCCAIN

SUPERVISOR  
FUEL SUPPORT  
J. W. WOOD

MANAGER  
TRANSMISSION &  
DISTRIBUTION  
J. E. GETZER

CONTRACT  
ADMINISTRATOR  
W. K. THACKER

PURCHASING  
AGENT  
C. B. MANNING, JR.

CONTRACT  
ADMINISTRATOR  
O. J. TURZAK

SUPERVISOR  
BUILDING  
SERVICE  
D. F. INGERSOLL

MANAGER  
EMPLOYEE  
DEVELOPMENT  
V. W. THORN

MANAGER  
EMPLOYEE  
BENEFITS  
S. E. UEBEL

STORES  
SUPERVISOR  
(SO. SUBCOAST)  
J. H. ARTIS, JR.

STORES  
SUPERVISOR  
(NORTHERN)  
F. C. MILLER

STORES  
SUPERVISOR  
(NO. SUBCOAST)  
J. W. BRIDGSON

STORES  
SUPERVISOR  
(EASTERN)  
T. L. MCGOVERN

MANAGER  
POWER  
PLANT INVENTORY  
CONTROL  
W. J. BROWN, JR.

MANAGER  
POWER  
PLANT STORES  
S. WATSEY

MANAGER  
EMPLOYEE  
DEVELOPMENT  
V. W. THORN

EMPLOYMENT  
SUPERVISOR  
J. J. ROUSSEAU

MANAGER  
PERSONNEL  
SERVICES  
C. F. JOHNSON

STORES  
SUPERVISOR  
(NORTHERN)  
F. C. MILLER

STORES  
SUPERVISOR  
(NO. SUBCOAST)  
J. W. BRIDGSON

STORES  
SUPERVISOR  
(EASTERN)  
T. L. MCGOVERN

MANAGER  
POWER  
PLANT INVENTORY  
CONTROL  
W. J. BROWN, JR.

MANAGER  
POWER  
PLANT STORES  
S. WATSEY

MANAGER  
POWER  
PLANT STORES  
SUPERVISOR  
R. E. ROGERS

SUPERVISOR  
DEVELOPMENT  
V. W. THORN

EMPLOYMENT  
SUPERVISOR  
J. J. ROUSSEAU

MANAGER  
PERSONNEL  
SERVICES  
C. F. JOHNSON

STORES  
SUPERVISOR  
(NORTHERN)  
F. C. MILLER

STORES  
SUPERVISOR  
(NO. SUBCOAST)  
J. W. BRIDGSON

STORES  
SUPERVISOR  
(EASTERN)  
T. L. MCGOVERN

MANAGER  
POWER  
PLANT INVENTORY  
CONTROL  
W. J. BROWN, JR.

MANAGER  
POWER  
PLANT STORES  
S. WATSEY

MANAGER  
POWER  
PLANT STORES  
SUPERVISOR  
R. E. ROGERS

SUPERVISOR  
DEVELOPMENT  
V. W. THORN

EMPLOYMENT  
SUPERVISOR  
J. J. ROUSSEAU

MANAGER  
PERSONNEL  
SERVICES  
C. F. JOHNSON

STORES  
SUPERVISOR  
(NORTHERN)  
F. C. MILLER

STORES  
SUPERVISOR  
(NO. SUBCOAST)  
J. W. BRIDGSON

STORES  
SUPERVISOR  
(EASTERN)  
T. L. MCGOVERN

MANAGER  
POWER  
PLANT INVENTORY  
CONTROL  
W. J. BROWN, JR.

MANAGER  
POWER  
PLANT STORES  
S. WATSEY

MANAGER  
POWER  
PLANT STORES  
SUPERVISOR  
R. E. ROGERS

SUPERVISOR  
DEVELOPMENT  
V. W. THORN

EMPLOYMENT  
SUPERVISOR  
J. J. ROUSSEAU

MANAGER  
PERSONNEL  
SERVICES  
C. F. JOHNSON

STORES  
SUPERVISOR  
(NORTHERN)  
F. C. MILLER

STORES  
SUPERVISOR  
(NO. SUBCOAST)  
J. W. BRIDGSON

STORES  
SUPERVISOR  
(EASTERN)  
T. L. MCGOVERN

MANAGER  
POWER  
PLANT INVENTORY  
CONTROL  
W. J. BROWN, JR.

MANAGER  
POWER  
PLANT STORES  
S. WATSEY

MANAGER  
POWER  
PLANT STORES  
SUPERVISOR  
R. E. ROGERS

SUPERVISOR  
DEVELOPMENT  
V. W. THORN

EMPLOYMENT  
SUPERVISOR  
J. J. ROUSSEAU

MANAGER  
PERSONNEL  
SERVICES  
C. F. JOHNSON

STORES  
SUPERVISOR  
(NORTHERN)  
F. C. MILLER

STORES  
SUPERVISOR  
(NO. SUBCOAST)  
J. W. BRIDGSON

STORES  
SUPERVISOR  
(EASTERN)  
T. L. MCGOVERN

MANAGER  
POWER  
PLANT INVENTORY  
CONTROL  
W. J. BROWN, JR.

MANAGER  
POWER  
PLANT STORES  
S. WATSEY

MANAGER  
POWER  
PLANT STORES  
SUPERVISOR  
R. E. ROGERS

SUPERVISOR  
DEVELOPMENT  
V. W. THORN

EMPLOYMENT  
SUPERVISOR  
J. J. ROUSSEAU

MANAGER  
PERSONNEL  
SERVICES  
C. F. JOHNSON

STORES  
SUPERVISOR  
(NORTHERN)  
F. C. MILLER

STORES  
SUPERVISOR  
(NO. SUBCOAST)  
J. W. BRIDGSON

STORES  
SUPERVISOR  
(EASTERN)  
T. L. MCGOVERN

MANAGER  
POWER  
PLANT INVENTORY  
CONTROL  
W. J. BROWN, JR.

MANAGER  
POWER  
PLANT STORES  
S. WATSEY

MANAGER  
POWER  
PLANT STORES  
SUPERVISOR  
R. E. ROGERS

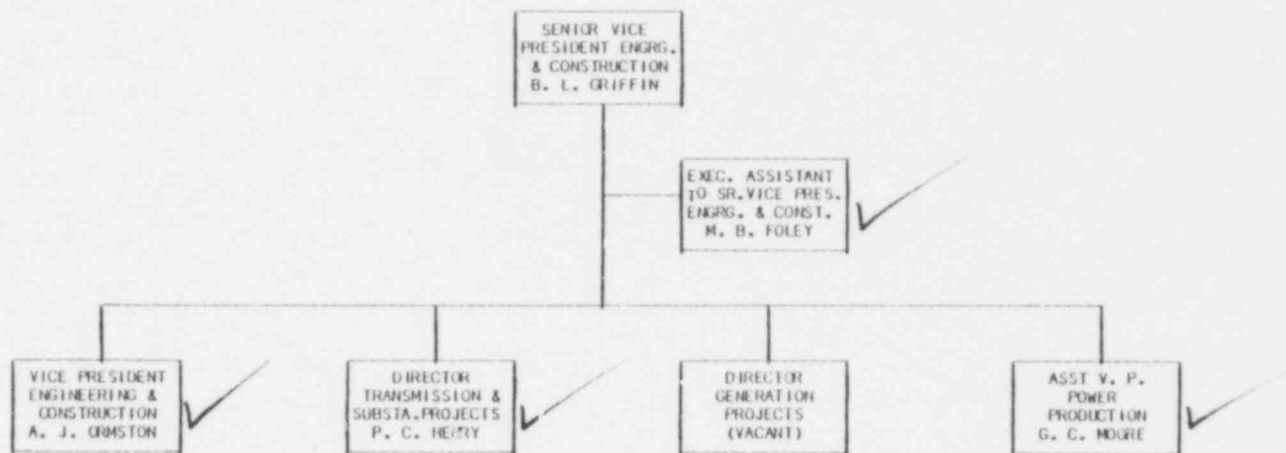
POOR ORIGINAL

POOR ORIGINAL

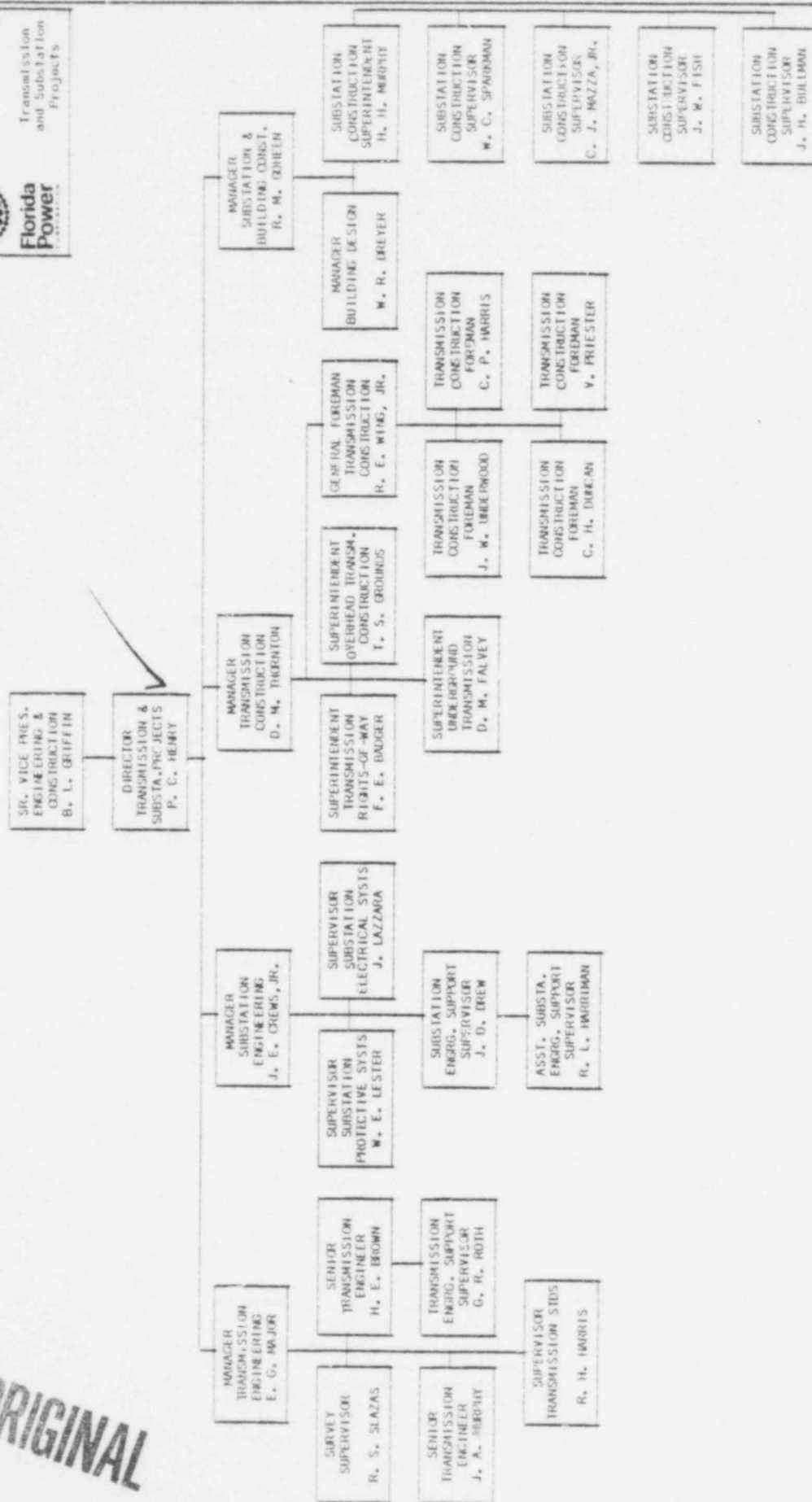


June, 1979  
Chart D

Engineering  
and  
Construction  
(Staff)



### Transmission and Substation Projects



POOR ORIGINAL

456 248

June, 1979  
Chart D-2



Florida  
Power

Generation  
Projects

DIRECTOR  
GENERATION  
PROJECTS  
(VACANT)

GENERATION  
PROJECTS  
FINANCIAL MGR.  
R.H. WILLIAMS

MANAGER  
GENERATION  
PROJECTS DESIGN  
W. O. RAY

COMBUSTION  
TURBINE  
PROJECTS MGR  
M. H. KLEINMAN

PROJECT MANAGER  
MID-BOYS PROJECT  
W.A. SZELISTOWSKI

COAL CONVERSION  
I & C CONSTR.  
SUPERVISOR  
H.E. DUMAS, JR.

COAL CONVERSION  
PLANNING  
SUPERVISOR  
R. C. HARG

COAL CONVERSION  
ENGINEERING  
MANAGER  
C. B. DOYLE

COMBUSTION  
TURBINE PROJECTS  
ENGRG. MANAGER  
J. E. DAWSON

COAL CONVERSION  
PURCHASING  
AGENT  
R. F. MIDDLEY

COAL CONVERSION  
PROJECT  
CONTROLLER  
W. B. MCQUARRIE

QUALITY  
SUPERVISOR  
L.A. BROSCHE III

COAL CONVERSION  
CONSTRUCTION  
SUPERINTENDENT  
P. S. DAVIS

COAL CONVERSION  
PROJECT SVCS  
SUPERVISOR  
R. M. HILL

COMBUSTION  
TURBINE PROJECTS  
CONST. MANAGER  
C. E. JACKSON

COAL CONVERSION  
ELECTRICAL  
CONSTR. SUPV.  
M. ROBINSON, JR.

COAL CONVERSION  
STRUCTURAL  
CONSTR. SUPV.  
D. B. BLACK

COAL CONVERSION  
MECHANICAL  
CONSTR. SUPV.  
A. T. NELSON

COAL CONVERSION  
I & C CONSTR.  
SUPERVISOR  
A. P. VOGT

CR 4 & 5  
PROJECT MANAGER  
J. A. HANCOCK

CR 4 & 5  
PLANT MANAGER  
C.H. TAYLOR, JR.

CR 4 & 5  
PROJECT  
MATERIAL MGR.  
J. H. LAMER

CR 4 & 5  
SITE ADMIN. SVCS.  
SUPERVISOR  
T. L. DAUER

CR 4 & 5  
PROJECT QUALITY  
MANAGER  
D.W. FEHRICK IV

CR 4 & 5  
CONSTRUCTION  
MANAGER  
W.R. ZIMMERMAN

CR 4 & 5  
ENGINEERING  
MANAGER  
J. C. HOBBS, JR.

CR 4 & 5  
MECHANICAL  
CONSTR. SUPV.  
D. G. DINGLE

CR 4 & 5  
ELECTRICAL  
CONSTR. SUPV.  
B. J. MARSHALL

CR 4 & 5  
STRUCTURAL  
CONSTR. SUPV.  
C. FACHOS

CR 4 & 5  
CONSTRUCTION  
SVCS. SUPV.  
C. R. SHIPES

CR 4 & 5  
MECHANICAL  
CONSTR. SUPV.  
H. L. CARTER

POOR ORIGINAL

POOR ORIGINAL

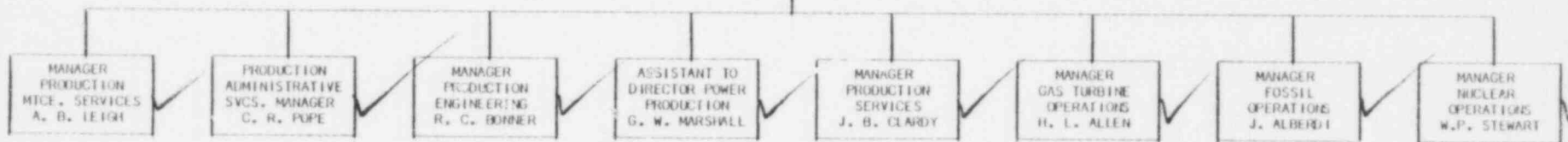


Florida  
Power

June, 1979  
Chart D-5

Production  
(Staff)

ASST. V.P.  
POWER  
PRODUCTION  
G.C. MOORE ✓



456 249

June, 1979  
Chart D-4



Maintenance Svcs  
Administration  
Svcs, Production  
Svcs and Produc-  
tion Engineering

ASST. V.P.  
POWER  
PRODUCTION  
G.C. MOORE

MANAGER  
PRODUCTION  
MICE - SERVICES  
A. B. LEIGH

MANAGER  
PRODUCTION  
PROJECTS  
A. N. BALL

SR. ELECTRICAL  
& CONTROLS  
SUPERVISOR  
E. HURLAND

MANAGER  
BOILER  
MAINTENANCE  
D. G. STOCKY

SENIOR SYSTEM  
MECHANICAL  
SUPERVISOR  
C. H. BAKER

SYSTEM MICE,  
CREW MECHANICAL  
SUPERVISOR  
T. J. BOURQUE

SYSTEM MICE,  
CREW MECHANICAL  
SUPERVISOR  
C. E. HERRICK

SYSTEM MICE,  
CREW MECHANICAL  
SUPERVISOR  
W. J. HUNT

PRODUCTION  
ADMINISTRATIVE  
SVCS. MANAGER  
C. R. POPE

PRODUCTION  
ADMINISTRATIVE  
ASSISTANT  
T. S. JOHNSON

PRODUCTION  
COST CONTROL  
SUPERVISOR  
(VACANT)

SUPERVISOR  
SYSTEM FUEL  
OPERATIONS  
R. W. REED

SYSTEM FUEL  
HANDLING  
SUPERVISOR  
J. M. WILSON, JR.

MANAGER  
PRODUCTION  
SERVICES  
J. B. CLARKE

SUPV. CHEMICAL  
& ENVIRONMENTAL  
SERVICES  
D. A. SWARTZ

SUPERVISOR  
PLANT  
PERFORMANCE  
G. L. MACLY

MANAGER  
FOSSIL  
ENGINEERING  
A. L. GOMEZ

MANAGER  
NUCLEAR  
ENGINEERING  
D. A. SHOOK

PRODUCTION  
RESULTS  
SUPERVISOR  
G. L. PETERSEN

MANAGER  
PRODUCTION  
ENGINEERING  
R. C. BOWEN

ASST. TO MANAGER  
PRODUCTION  
ENGINEERING  
W. O. FRAZEE

MANAGER  
PRODUCTION  
ENGINEERING  
SERVICES  
T. R. BURTON

PRODUCTION  
SUPPORT  
SUPERVISOR  
P. H. SELTZER

PRODUCTION  
MICROFILM  
SPECIALIST  
D. A. WARREN

POOR ORIGINAL

456 25D

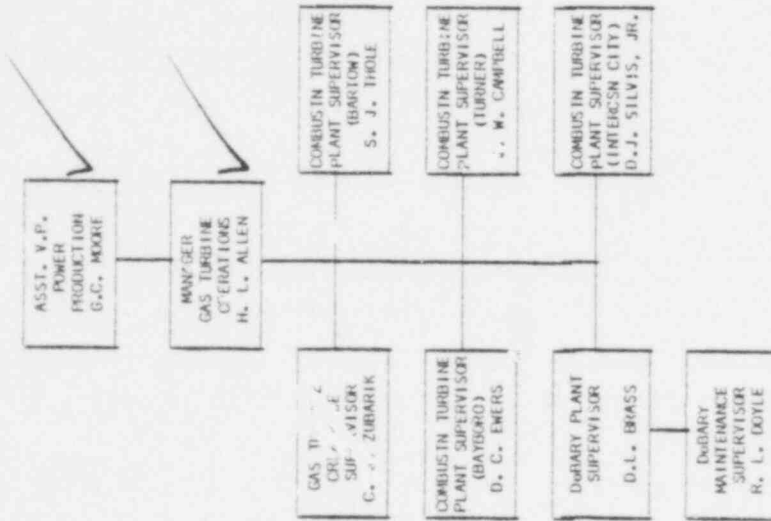


June, 1979  
Chart D-5



Florida  
Power  
& Light  
Company

Gas Turbine  
Operations



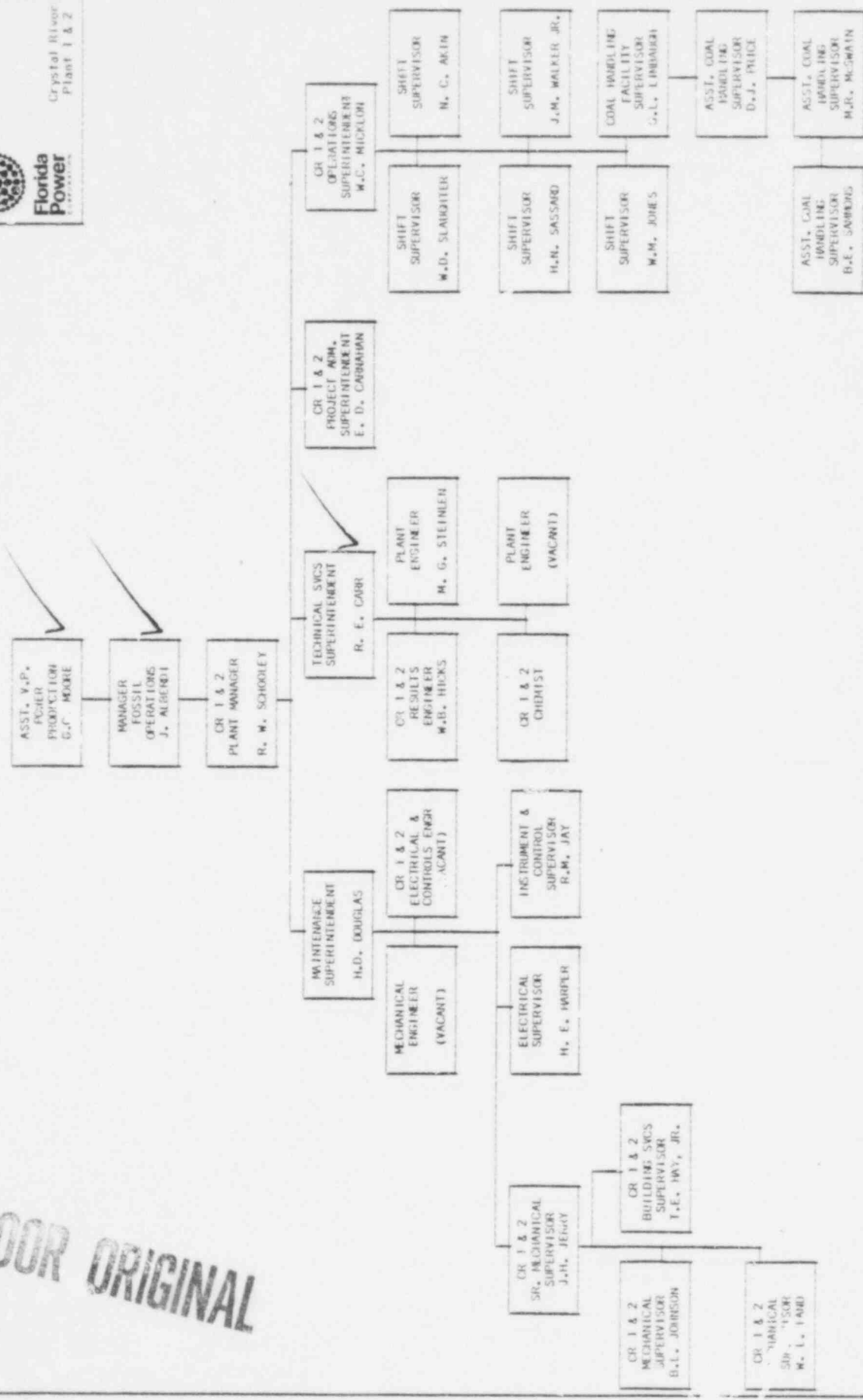
POOR ORIGINAL

June, 1979  
Chart D-6



Crystal River  
Plant 1 & 2

POOR ORIGINAL



January, 1974  
Chart D-7



Fossil  
Operations

ASST. V.P.  
POWER  
PRODUCTION  
G.C. MOORE

MANAGER  
FOSSIL  
OPERATIONS  
J. ALBERICI

ANCLOTE  
PLANT MANAGER  
D. I. FLYNN

ANCLOTE  
TECHNICAL  
SERVICES SUPT.  
D. T. BUELL

ANCLOTE  
CHEMIST  
M. S. MILLER

ANCLOTE  
OPERATIONS  
SUPERINTENDENT  
C. O. KIRTON

SHIFT  
SUPERVISOR  
S. L. STANBROUGH

SHIFT  
SUPERVISOR  
S. W. BOUGHTON

SHIFT  
SUPERVISOR  
J. A. CASON, JR.

SHIFT  
SUPERVISOR  
G. N. GABRYSON

SHIFT  
SUPERVISOR  
R. W. GATES

ANCLOTE  
MAINTENANCE  
SUPERINTENDENT  
F. E. MARTIN, JR.

ANCLOTE  
MECHANICAL  
SUPERVISOR  
J. W. FENER

ELECTRICAL  
SUPERVISOR  
N. L. SUDUTH

INSTRUMENT &  
CONTROLS  
SUPERVISOR  
R. C. HEDLUND

AVON PARK  
PLANT MANAGER  
J. G. PORTER

AVON PARK  
OPERATIONS  
SUPERINTENDENT  
R. A. WOODRUFF

HIGGINS PLANT  
MANAGER  
D. V. PICKETT

HIGGINS  
OPERATIONS  
SUPERINTENDENT  
F. E. DERRY

HIGGINS  
MAINTENANCE  
SUPERINTENDENT  
W. P. REILLY III

SUNWABEE  
PLANT MANAGER  
E. M. JAYWOOD, JR.

SUNWABEE  
OPERATIONS  
SUPERINTENDENT  
R. MONTMAYOR

TURNER  
PLANT MANAGER  
J. E. WITTENBURG

TURNER  
OPERATIONS  
SUPERINTENDENT  
H. M. FADELEY

TURNER  
MECHANICAL  
ENGINEER  
E. A. SARRIS

BARTON  
PLANT MANAGER  
D. W. WEST

BARTON  
TECHNICAL SVCS.  
SUPERINTENDENT  
M. E. HIGGINS

BARTON  
CHEMIST  
D. J. TIERNEY

BARTON  
OPERATIONS  
SUPERINTENDENT  
D. E. TURNER, JR.

SHIFT  
SUPERVISOR  
M. L. CROSS

SHIFT  
SUPERVISOR  
J. B. HOPKINS

SHIFT  
SUPERVISOR  
V. F. FELSMAIER

SHIFT  
SUPERVISOR  
W. M. MATTHEWS

SHIFT  
SUPERVISOR  
W. P. KENNY

BARTON  
MAINTENANCE  
SUPERINTENDENT  
W. E. DUBLEY

BARTON  
MECHANICAL  
SUPERVISOR  
W. A. THOMPSON

BARTON  
ELECTRICAL &  
CONTROLS ENGR.  
J. E. HOLY

POOR ORIGINAL

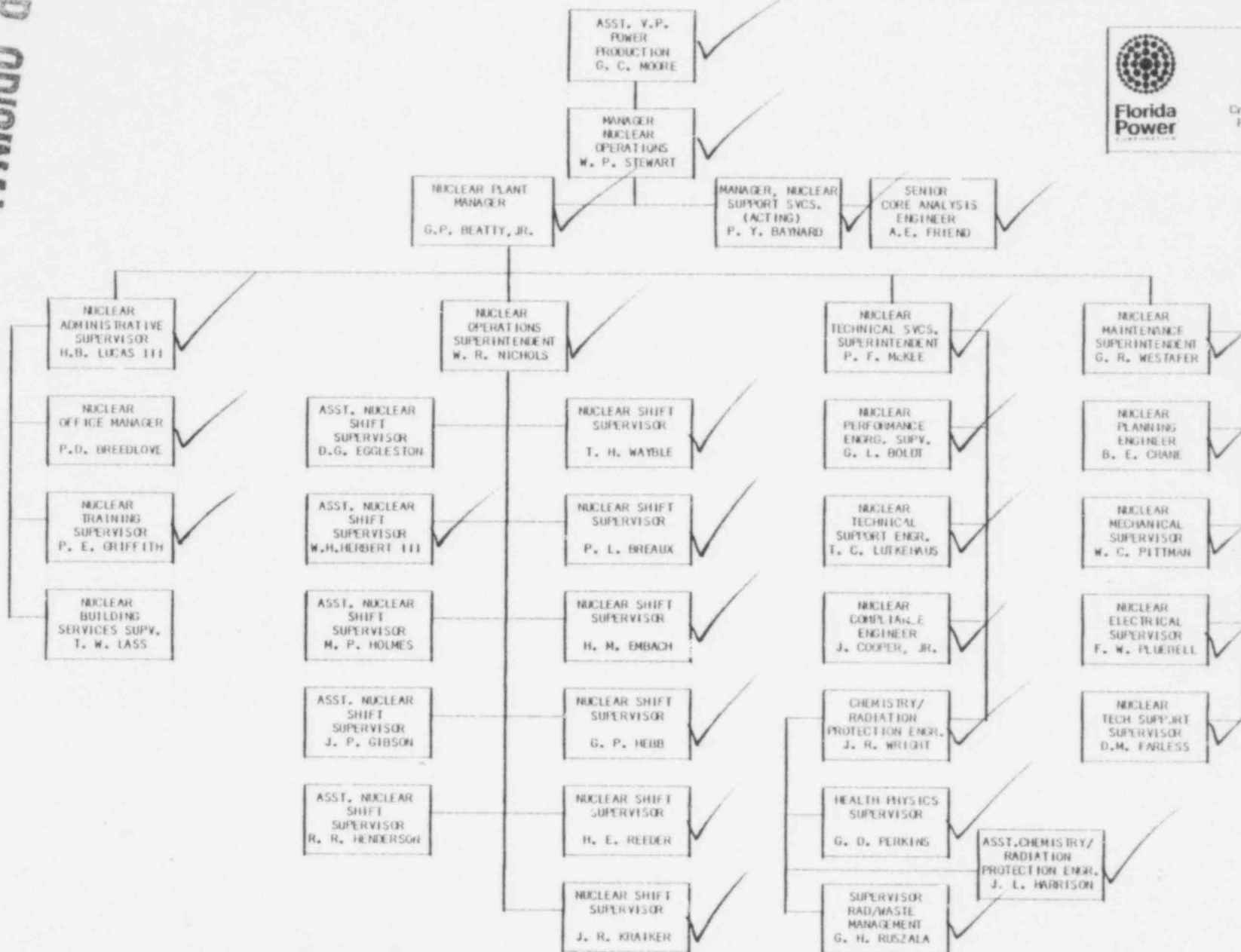
POOR ORIGINAL



Florida  
Power

June, 1979  
Chart D-8

Crystal River  
Plant Unit  
No. 3



POOR ORIGINAL

# NUCLEAR SUPPORT SERVICES DEPARTMENT

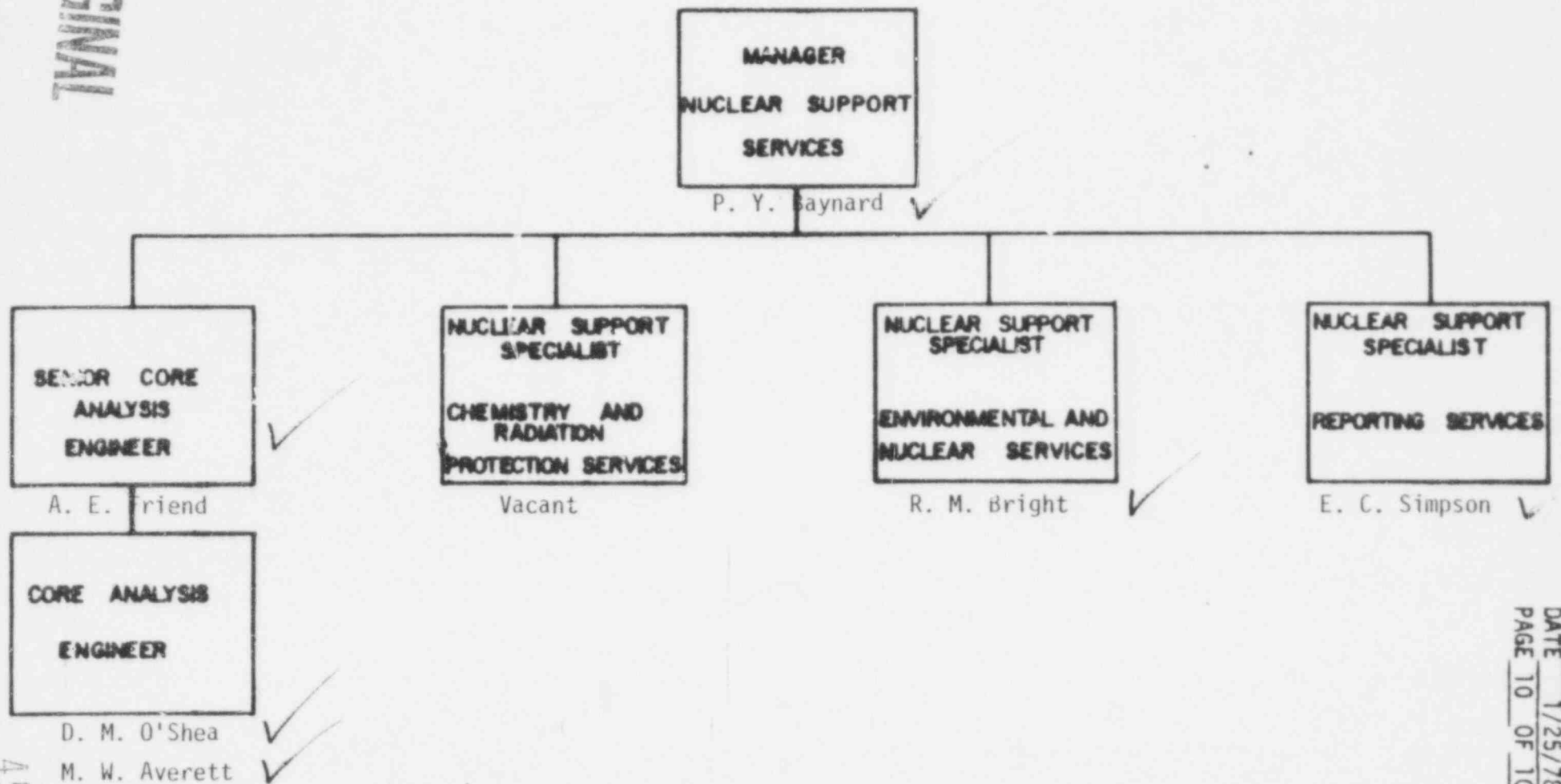


FIGURE 1

BABCOCK & WILCOX COMPANY

The Babcock & Wilcox Company, the supplier of the Nuclear Steam Supply System is available to provide Florida Power with service engineers to augment and/or assist the site staff. They also are available on an immediate basis with engineering assistance in their home office. This support can be rapidly arranged through their service manager at their Lynchburg, VA office during working hours and through the service managers personal residence during non-working hours.

Since Florida Power Corporation has an existing Service Contract with the Babcock & Wilcox Company, there is no administrative delay in the pursuit of these services. This contract is a Master Services Contract effective on May 10, 1978. In situations requiring extensive support the B&W Company is willing to commit its entire available resources and capabilities, under this contract to assist its customers. During the recent TMI II situation the B&W company provided extensive support and at no time was ever placed in a position when it could not provide more manpower support.

ETibbs(B&W)D83

## GILBERT/COMMONWEALTH

### A. CAPABILITY

The total manpower of Gilbert/Commonwealth is approximately 3800 with 1220 being engineers. G/C has designed more than 200 significant projects relating to power generation with a combined capacity of more than 50,000 MW. Of those 200 projects, 71 were fossil units, 12 are completed nuclear projects and 13 are nuclear projects being designed. Scope of services include, but is not limited to, design, construction management, licensing, QA, environmental, seismic analysis, in-service inspection, radwaste, management consulting and providing continuing services.

### B. PERSONS PRESENTLY ASSIGNED

Electrical Engineering	M. E. Ober (R. P. Cronk)
I&C	T. G. Reitz
Mechanical/Nuclear Engineering	R. E. Vaughn
Structural	M. R. Wardrop
Management	F. J. Tomazic
Elec/I&C Drafting	T. J. Huddock
Mech. Drafting	D. C. Kramer

Other personnel (total equivalent personnel per month for last two years averaged 16.8) are available as required from the following disciplines: Architectural, Building Service, Power Plant Reliability, Layout, Piping, Environmental/Regulatory, Applied Engineering Analysis, Chemical Engineering, Structural Drafting, Cost Engineering, Technicians and Secretaries.

### C. PERSONS AVAILABLE IF CR-3 EXPERIENCED A TMI UNIT 2 ACCIDENT

Gilbert has supported GPU with at least 50 personnel as a result of the TMI Unit 2 incident.

G/C will support FPC on a similar scale or larger, if required, if an incident occurred at CR-3 as did at TMI Unit 2.

### D. CONTRACT

Florida Power Corporation presently has a contract with Gilbert Associates to provide continuing engineering services on Crystal River #3. The present contract runs thru December, 1980 and is renewable.

The Manager, Nuclear Engineering has the responsibility of the Contract.

Gilbert is available by a phone call.

ETibbs (Gilbert)D83

456 258

## MPR ASSOCIATES

MPR Associates, Inc., will make available to Florida Power Corporation a team of about six multi-disciplined people, each with an average of about twenty years of experience in the design, construction, repair, and operational aspects of nuclear power plants, to assist bringing the Crystal River Unit 3 plant to a safe and stable condition in the event of an accident. These people will have first-hand experience in the following areas:

- o Nuclear plant test programs, procedures and instrumentation.
- o Transient thermal dynamics and hydraulics of nuclear power plants, including safety analyses and tests.
- o Nuclear, mechanical, structural, metallurgical, control and system engineering experience with nuclear power plants.
- o Plant chemistry and radiochemistry.
- o Nuclear fuel behavior.
- o Radwaste processing and handling.

Most of these people will have been involved with evaluation and recovery from one or more incidents that have occurred in the past in commercial nuclear plants, test reactors, early prototype reactors, developmental fuel testing loops, etc. These people can be made available to be at the site in a relatively short order, mainly dependent on flight arrangements. The number of people to be sent and the specific persons chosen will depend on the requirements of the actual incident.

The MPR home office will have additional personnel standing by to assist and back up its "on-site" personnel. These home office personnel will provide additional background and experience in all phases of the design, construction and operation of nuclear power plants. These home office people will be available to make analysis and assessment of technical issues and problems, as well as review of conclusions or recommended actions being put forth, to assist the on-site personnel in bringing the plant to a safe and stable condition.

Florida Power Corporation presently has a contract with MPR Associates to provide services on Crystal River #3 as requested. The present contract runs thru December 1979 and is renewable.

The Manager Nuclear Engineering has the responsibility of the contract.

MPR is available by a phone call.

ETibbs (MPR)D83

456 258.



PINKERTON

Florida Power Corporation utilizes the Pinkerton security service to provide Guard Force personnel for the company system wide. As a condition of contract, Pinkerton is required to supply FPC with as many as 100 additional Guards per shift in the event of emergency situations. Additionally, the Guards would be provided transportation and be available within a 48 hour period.

The emergency Guard Force requirement is for conventional guards. Such Guards, however, could be utilized to support the existing CR-3 Guard Force in the event of an emergency such as that which occurred at Three Mile Island.

ETibbs (Pinkerton)D83

456 259

SOUTHERN SCIENCE APPLICATION, INC.

Florida Power Corporation utilizes Southern Science Applications, Division of Black and Veatch, for nuclear consulting services.

Florida Power Corporation solicits formal proposals from Southern Science Applications for all contracts. Mr. Kenneth E. Roach, President of Southern Science Applications, has the authority to allocate these resources.

Contract durations have ranged from 1 month to 1 year.