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

SEP 24 1980

Docket No. 50-364

APPLICANT: Alabama Power Company

FACILITY: Joseph M. Farley Nuclear Plant Unit 2

SUBJECT: SUMMARY OF JUNE 24, 1980 MEETING REGARDING REVIEW OF OPERATING LICENSE APPLICATION

The staff met with Alabama Power Company management personnel in Bethesda, Maryland as a part of its evaluation of organization and management improvements (Requirement I.B.1.2 in NUREG-0694, "TMI Related Requirements for New Operating Licenses"). Enclosure 1 provides a list of attendees. Enclosure 2 is an agenda for the meeting.

Enclosure 3 is a copy of management, organization, and personnel qualifications provided as a handout at the meeting. Mr. O. Kingsley, Manager of Nuclear Engineering and Technical Support described Alabama Power Company's organization and qualification, using the enclosed charts.

L H Kintner

Lester L. Kintner, Project Manager
Licensing Branch No. 2
Division of Licensing

Enclosure:
As stated

cc: See next page

SEP 24 1980

Mr. F. L. Clayton, Jr., Senior Vice
President
Alabama Power Company
Post Office Box 2641
Birmingham, Alabama 35291

cc: Mr. Alan R. Barton
Executive Vice President
Alabama Power Company
Post Office Box 2641
Birmingham, Alabama 35291

Mr. Ruble A. Thomas
Vice President
Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202

Mr. George F. Trowbridge
Shaw, Pittman, Potts and Trowbridge
1800 M Street, N. W.
Washington, D. C. 20036

Mr. W. Bradford
NRC Resident Inspector
P. O. Box 1814
Dothan, Alabama 36302

MEETING SUMMARY DISTRIBUTION

Docket File
NRC PDR
Local PDR
NSIC
TIC
TERA
NRR Reading
LB #2 File
H. Denton
E. Case
D. Eisenhut
R. Purple
B. J. Youngblood
A. Schwencer
F. Miraglia
J. Miller
G. Lainas
R. Vollmer
J. P. Knight
R. Bosnak
F. Schauer
R. E. Jackson
Project Manager LKintner
Licensing Assistant MService
Attorney, OELD
I&E (3)
ACRS (16)
R. Tedesco
G. Lear
V. Noonan
S. Pawlicki
V. Benaroya
Z. Rosztoczy
W. Haass

D. Muller
R. Ballard
W. Regan
D. Ross
P. Check
R. Satterfield
O. Parr
F. Rosa
W. Butler
W. Kreger
R. Houston
T. Murphy
L. Rubenstein
T. Speis
W. Johnston
J. Stolz
S. Hanauer
W. Gammill
F. Schroeder
D. Skovholt
M. Ernst
R. Baer
C. Berlinger
K. Kniel
G. Knighton
A. Thadani
D. Tondi

NRC Participants:

Others:

BCC: Applicant & Service List

ENCLOSURE 1

NRC MEETING WITH APCO
JUNE 24, 1:30 P.M.

NAME	POSITION	ORGANIZATION *
L. L. Kintner	LPM - Farley 2	LB#2/DOL/NRR
R. P. McDonald	Vice President Nuclear Generation	APCo
Ozen Batum	Mns. Nuclear Safety And Licensing	SCS
W. G. Hairston	Plant Manager	APCo
G. W. Rivenbark	Reviewer	NRR/HFD/LQB
D. M. Collins	SL, RPS	RPS/RAB/NRR
J. L. Minns	Leader Reviewer	RPS/RAB/NRR
R. H. Wessmann	Reactor Operations Specialist	IE HQ/NRC
W. H. Bradford	Resident Inspector - Farley	Region II IE
P. J. Kellogg	Chief, RPS#3 IE Region II	Region II IE
F. L. Clayton, Jr.	Sr. Vice President	APCo
O. D. Kingsley	Manager - NETS	APCo
R. L. George	Engineering & Licensing	APCo

* APCo - Alabama Power Company
SCS - Southern Company Services

ENCLOSURE 2

AGENDA ITEMS FOR JUNE 24, 1980

1:30 PM MEETING BETWEEN

NRC AND ALABAMA POWER CO.

Describe the current overall Farley 2 organization both onsite and offsite.

Discuss how the basic objectives of the February 25, 1980 draft "Criteria for Utility Management and Technical Competence" are met with respect to the offsite organization and resources, including the radiological protection organization.

Describe the responsibilities of each offsite organizational element that is related to the management or support of operation of the Farley Unit 2.

Explain the lines of authority and communication between these offsite organizational elements.

Explain the lines of authority and communication between these offsite organizational elements and the organizational elements at the site.

Describe the qualification and staffing levels of the offsite managers and technical staff (provide these in writing prior to meeting if possible).

Discuss the Independent Safety Engineering Group that is located on-site but reports to offsite management (May 13, 1980 Info. Report - SECY-80-242).

Describe how the corporate official in overall charge of nuclear plant operations is actively involved in plant operational activities - i.e.: what oversight and management responsibility and activities he personally handles.

Discuss how operational experience from Farley plants and other utilities, the NRC, INPO etc. are obtained, reviewed and disseminated to plant operators.

Describe how outside contractual assistance is relied on as technical or other support to operation of the nuclear plant.

Describe the national standards and NRC regulatory guides that you use as criteria for your current offsite management and technical support staff.

Describe offsite organization and resources for managing the response to and recovery from an accident.

ENCLOSURE 3

PRESENTATION

Alabama Power Company's

Offsite and Onsite Organization

Required to Operate and Support

Farley Nuclear Plant Unit 2

June 24, 1980

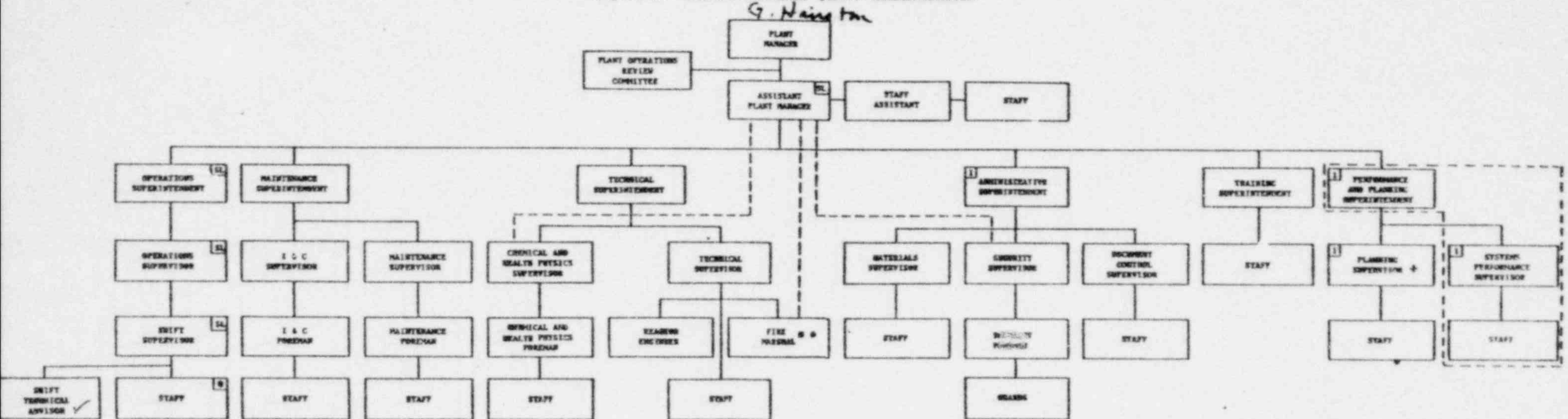
I. Describe the current overall Farley 2 Organization both onsite and offsite.

A. Figure 1 - Farley Nuclear Plant Organization

B. Figure 2 - Alabama Power Company Offsite Support Organization for Farley Nuclear Plant

C. Figure 3 - Alabama Power Company's Southern Company Affiliate-Southern Company Services Architect Engineering & Licensing Organization Related to the Farley Nuclear Plant

Figure 1 - FARLEY NUCLEAR PLANT ORGANIZATION



SL - SENIOR OPERATOR'S LICENSE
⊕ - REACTOR OPERATORS WILL HAVE OPERATOR'S LICENSE
⊕ ⊕ - ONSITE RESPONSIBILITY FOR FIRE PROTECTION PROGRAM
+ - WILL BE IMPLEMENTED PRIOR TO UNIT 2 FUEL LOAD
✓ - ASSUMES ROLE FOR EMERGENCY CONDITIONS

Figure 2 - ALABAMA POWER COMPANY
OFFSITE SUPPORT ORGANIZATION FOR
FARLEY NUCLEAR PLANT

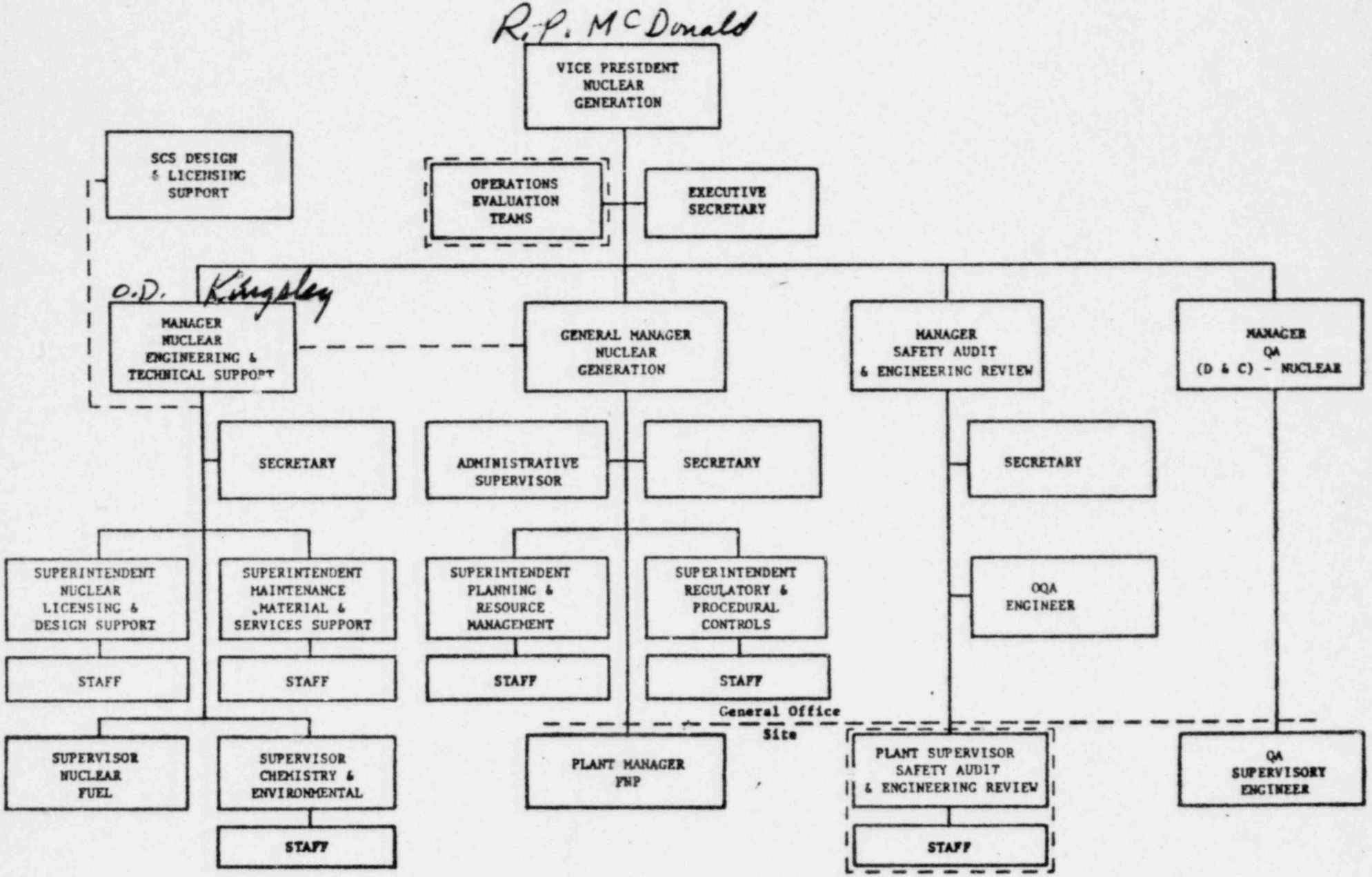
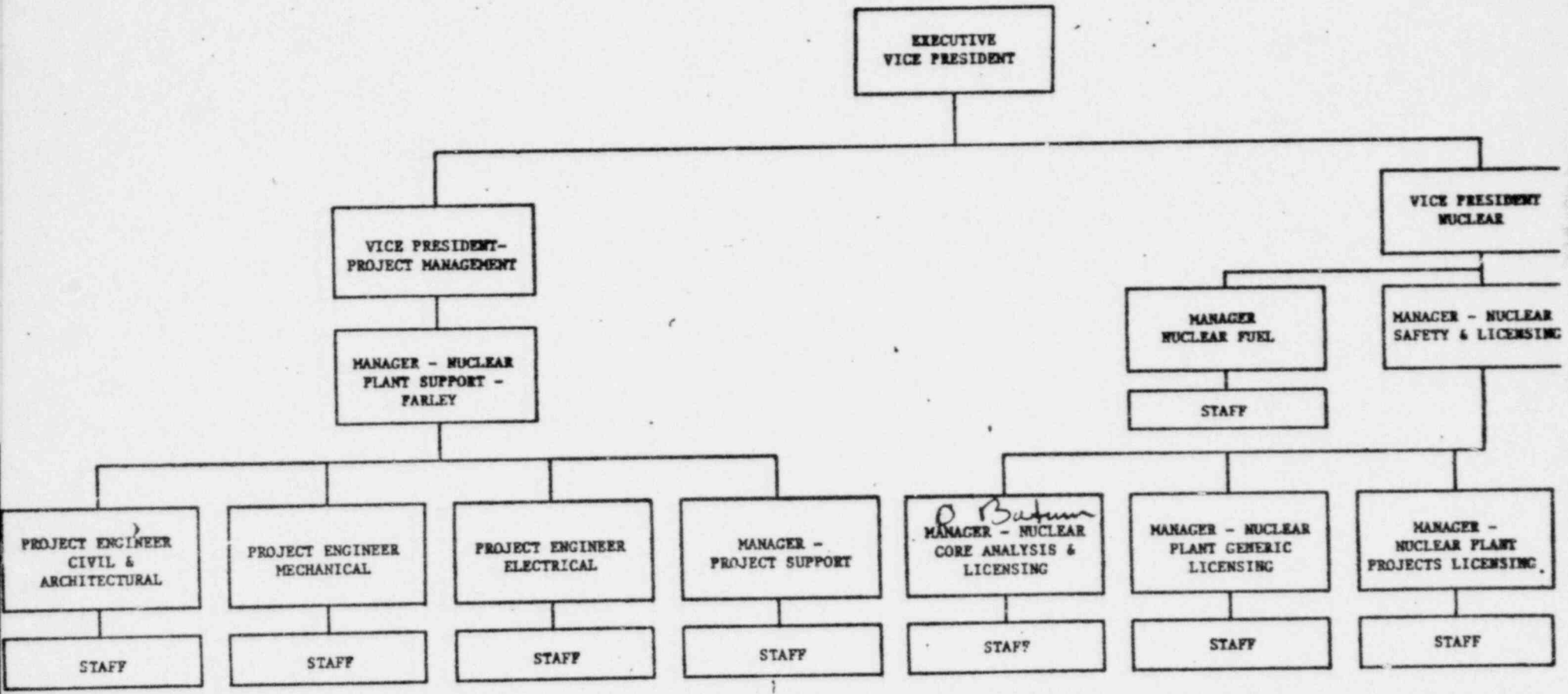


Figure 3 - SOUTHERN COMPANY SERVICES
ARCHITECT ENGINEERING & LICENSING ORGANIZATION
RELATED TO THE FARLEY NUCLEAR PLANT



II. Discuss how the basic objectives of the February 25, 1980 draft "Criteria For Utility Management And Technical Competence" are met with respect to the offsite organization and resources, including the radiological protection organization.

A. CRITERIA FOR ROUTINE OPERATIONS

1. Offsite organizations required involved in operational phases of plant operations; their responsibilities; lines of authority and communication between these groups; and lines of authority and communication between these groups and the onsite organization elements.

a. Figure 2 - Alabama Power Company Support Organization For Farley Nuclear Plant.

b. Figure 3 - SCS Architect Engineering & Licensing Organization Related To The Farley Nuclear Plant.

c. Figure 4 - Nuclear Licensing & Design Support Group.

d. Figure 5 - Maintenance, Material & Services Support Group.

e. Figure 6 - Nuclear Fuels and Contracts Group.

f. Figure 7 - Chemistry & Environmental Group.

g. Figure 8 - Planning & Resource Management Group.

h. Figure 9 - Regulatory & Procedural Control Group.

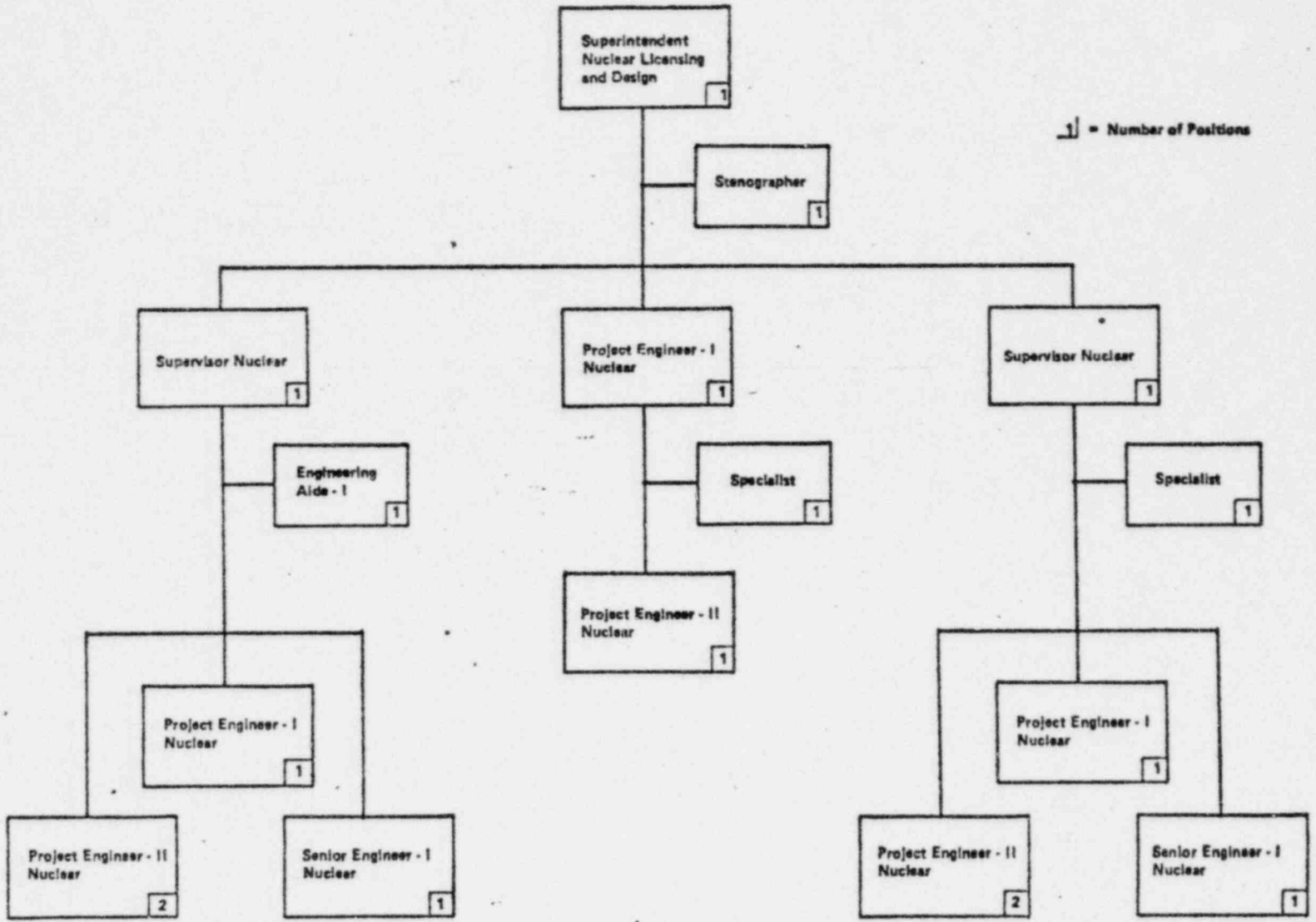
i. Figure 10- Administrative Group.

j. Figure 11- Safety Audit & Engineering Review Group.

k. Figure 12- Design & Construction Quality Assurance Group.

APCo.

FIGURE 4 - NUCLEAR LICENSING AND DESIGN SUPPORT GROUP



DESIGN SUPPORT

- Design Changes
- Plant Additions
- Unit Completion Designs
- Engineered Procurement
- Special Design Projects
- Outage Design Support

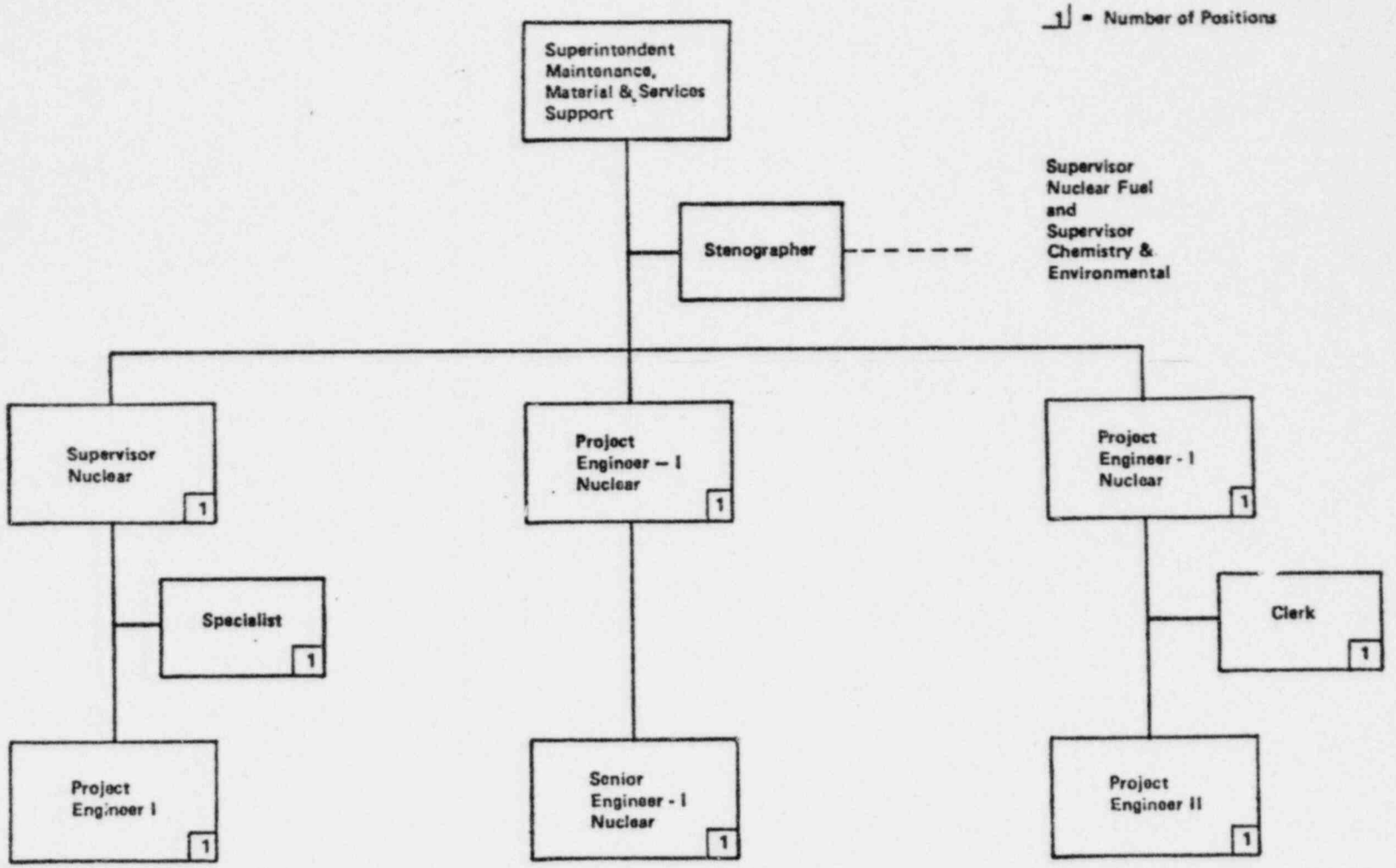
LICENSING COORDINATION

- Correspondence With NRC
- FSAR Maintenance Coordination
- Operating License Maintenance Coordination

LICENSING SUPPORT

- NRC Bulletins, Circulars, Notices, & Generic Letters
- 10CFR50.55(e) and 10CFR21 Evaluations and Reports
- Refueling Safety Evaluations
- Technical Support For Emergency Planning, Security, Fire Protection & Other Projects
- Special Licensing Projects
- Special Licensing Reports

FIGURE 5 - MAINTENANCE, MATERIALS, AND SERVICES SUPPORT GROUP



MAINTENANCE SUPPORT

- Mech, Elec, & I & C
- Radiation Control Technical
- Inservice Inspection Coordination & Technical
- Eddy Current & Other NDE
- Special Testing
- Outage Maintenance Support Coordination

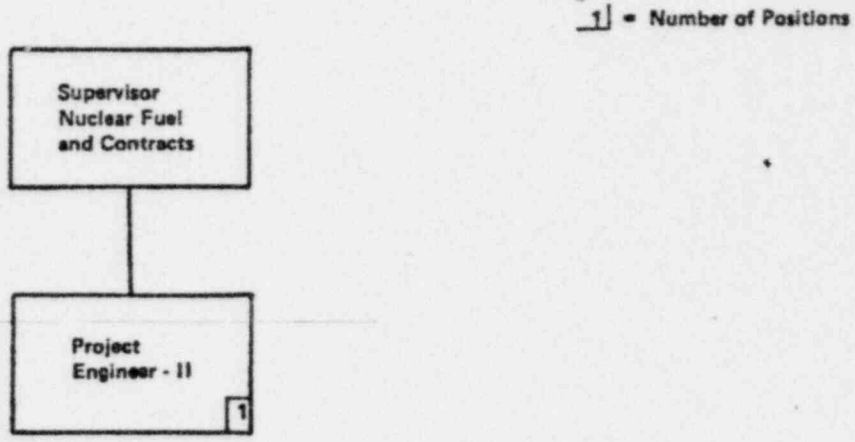
RADWASTE

- Engineering & Technical Support
- Contracts Management
- Special Projects

MATERIAL AND SERVICES

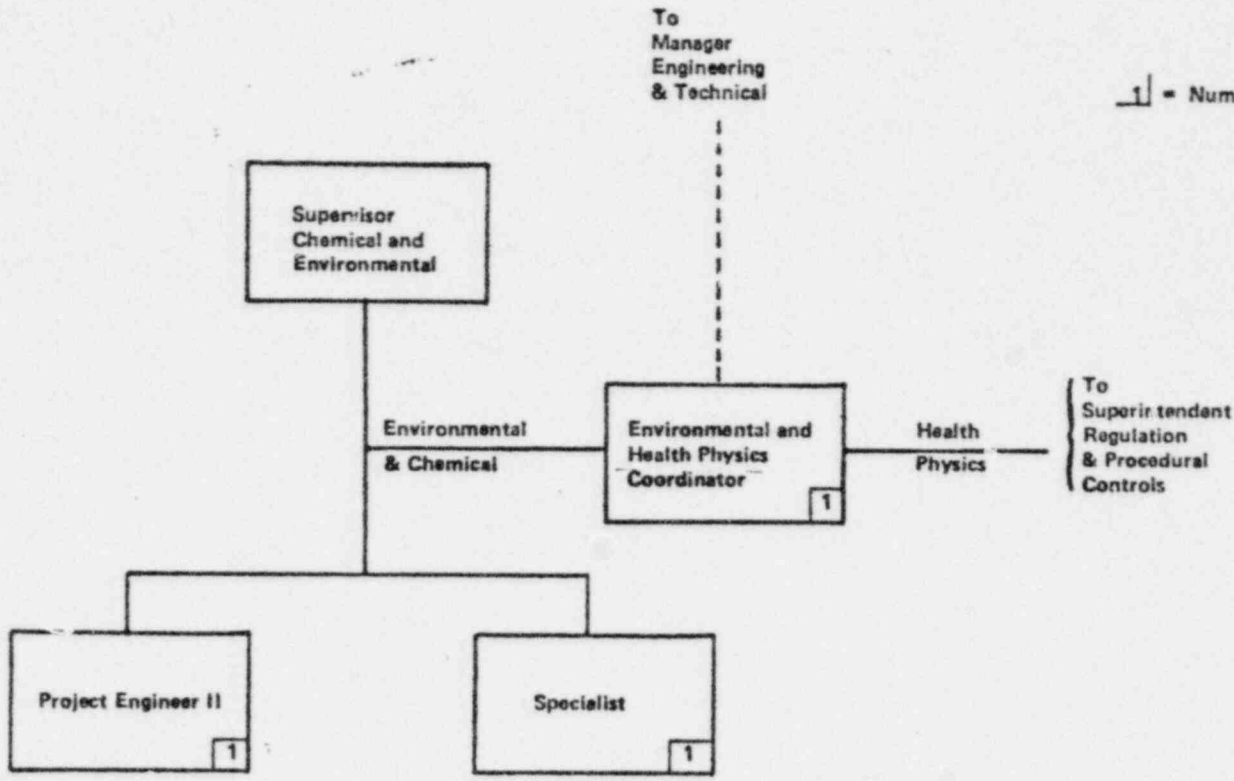
- Requisition Coordination
- Approved Nuclear Bidders List (Services) Control
- Vendor Quotation Evaluations
- Supervisory & Technical Support for Specified Material, Parts, Equipment, & Maintenance-Related, Procured Services
- "Hot List" Administration

FIGURE 6 - NUCLEAR FUELS AND CONTRACTS GROUP



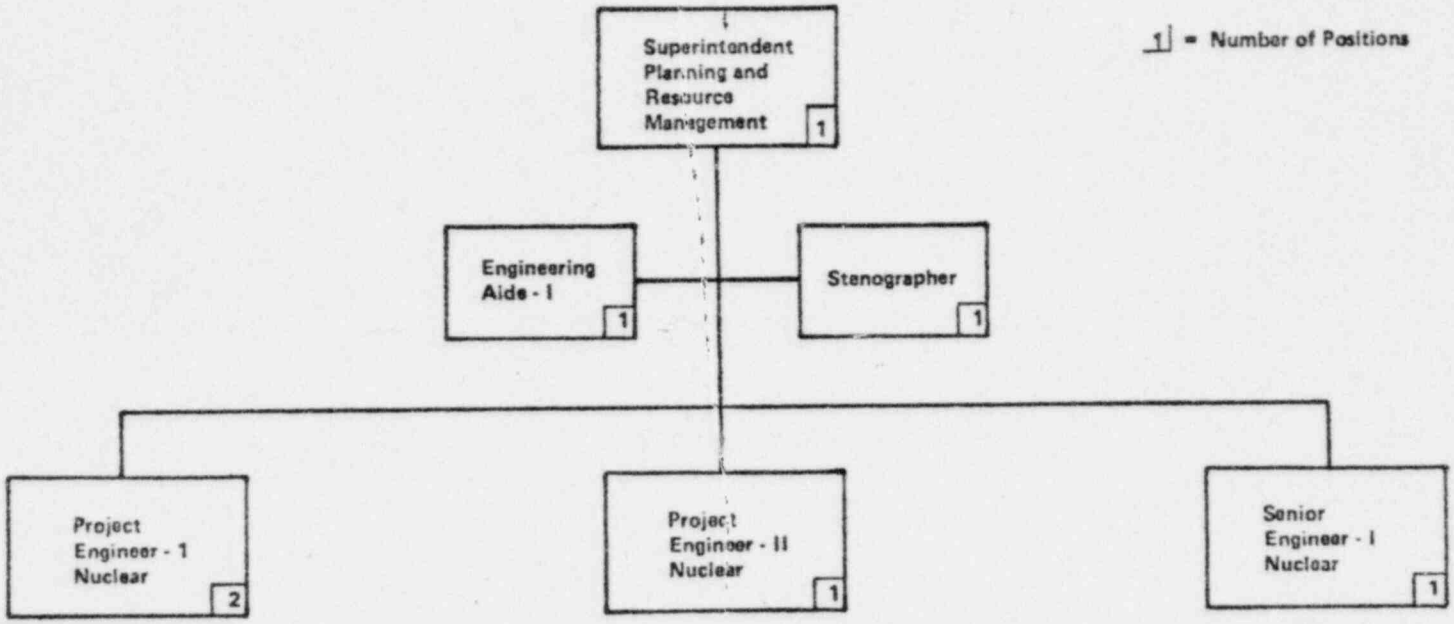
- Nuclear Fuel Cycle Management
- Nuclear Fuel Budgeting and Expenditure Control
- AE Support Contract Administration
- EWO Administration
- DOE Correspondence Coordination
- Department Lawsuit Support
- Section Business Plan
- Section Training

FIGURE 7 - CHEMISTRY AND ENVIRONMENTAL GROUP



- Radiological Environmental Monitoring Management
- NRC / NPDES / AWIC Reporting Coordination
- Water Chemistry Technical
- Radiochemistry Technical
- Special Studies
- Emergency Plan Technical Support

FIGURE 8 - PLANNING AND RESOURCE MANAGEMENT GROUP



- Department Budget
- Section Business Plan
- Department Invoice Review & Approval
- Stores, Inventory, and Purchasing Methods and Procedural Controls
- Department Furniture and Transportation

- Management Daily Status Reports
- Management Problem Reports
- Coordination of Commitment Documents for INPO, EPRI, AIF, SEE, Production Committee, EEI, and etc. involving nuclear matters.
- Coordinate Responses to Miscellaneous Survey or Position Requests

- Security Plan
- Generation and Outage Scheduling
- Design Change Review for Approval
- Coordination of Department Insurance Matters (Less Nuclear Fuel)

FIGURE 9 - REGULATORY AND PROCEDURAL CONTROL GROUP

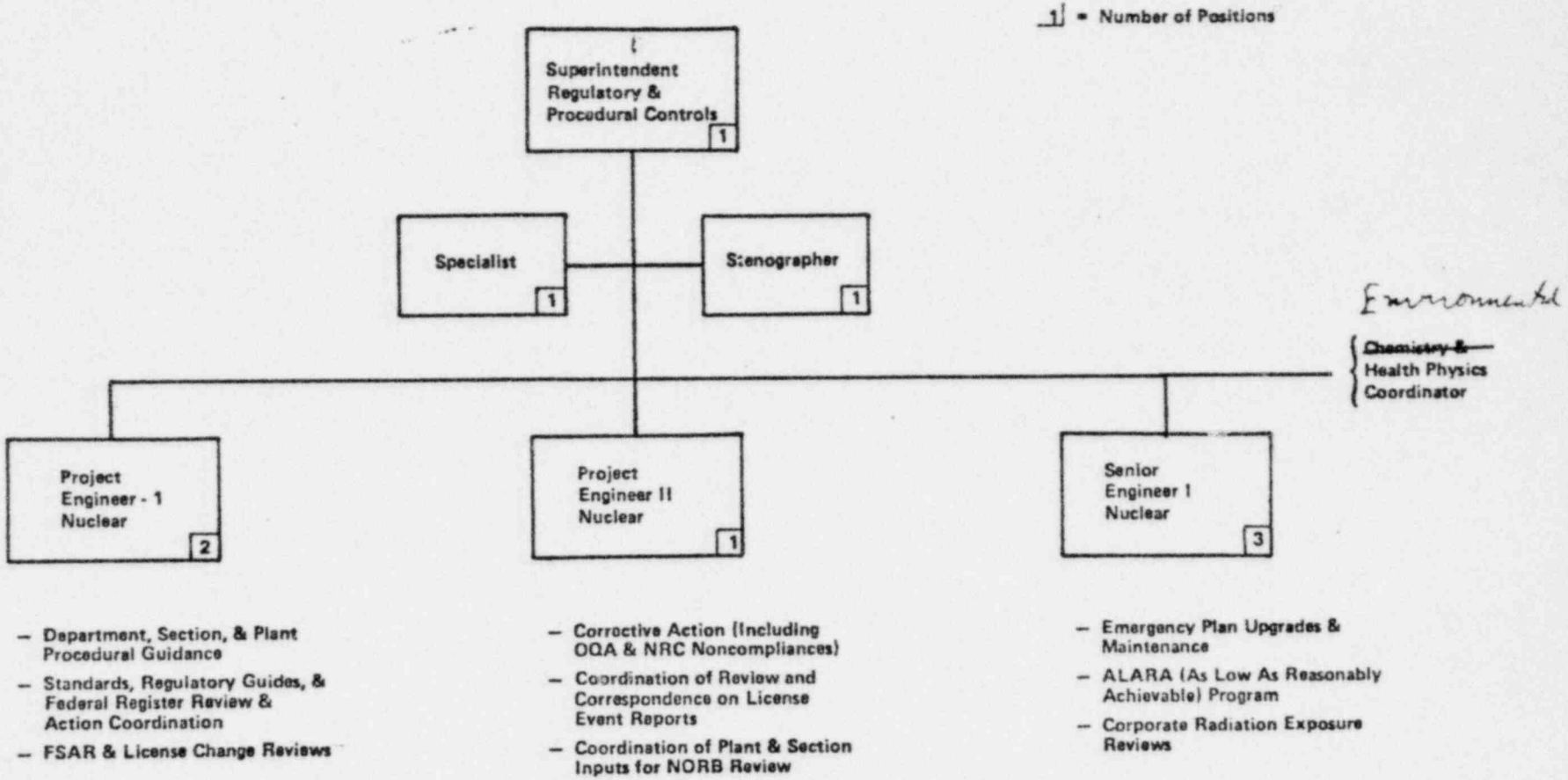
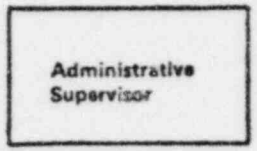


FIGURE 10 - ADMINISTRATION GROUP



- Department Business Plan Coordination
- Department Training Program & Training Support Coordination
- IBEW Contract Administration
- Contingency Manpower Planning
- Department Document Control
- Job Application Handling & Control of Position Description and Authorization Requests

FIGURE 11 - SAFETY AUDIT AND ENGINEERING REVIEW ORGANIZATION

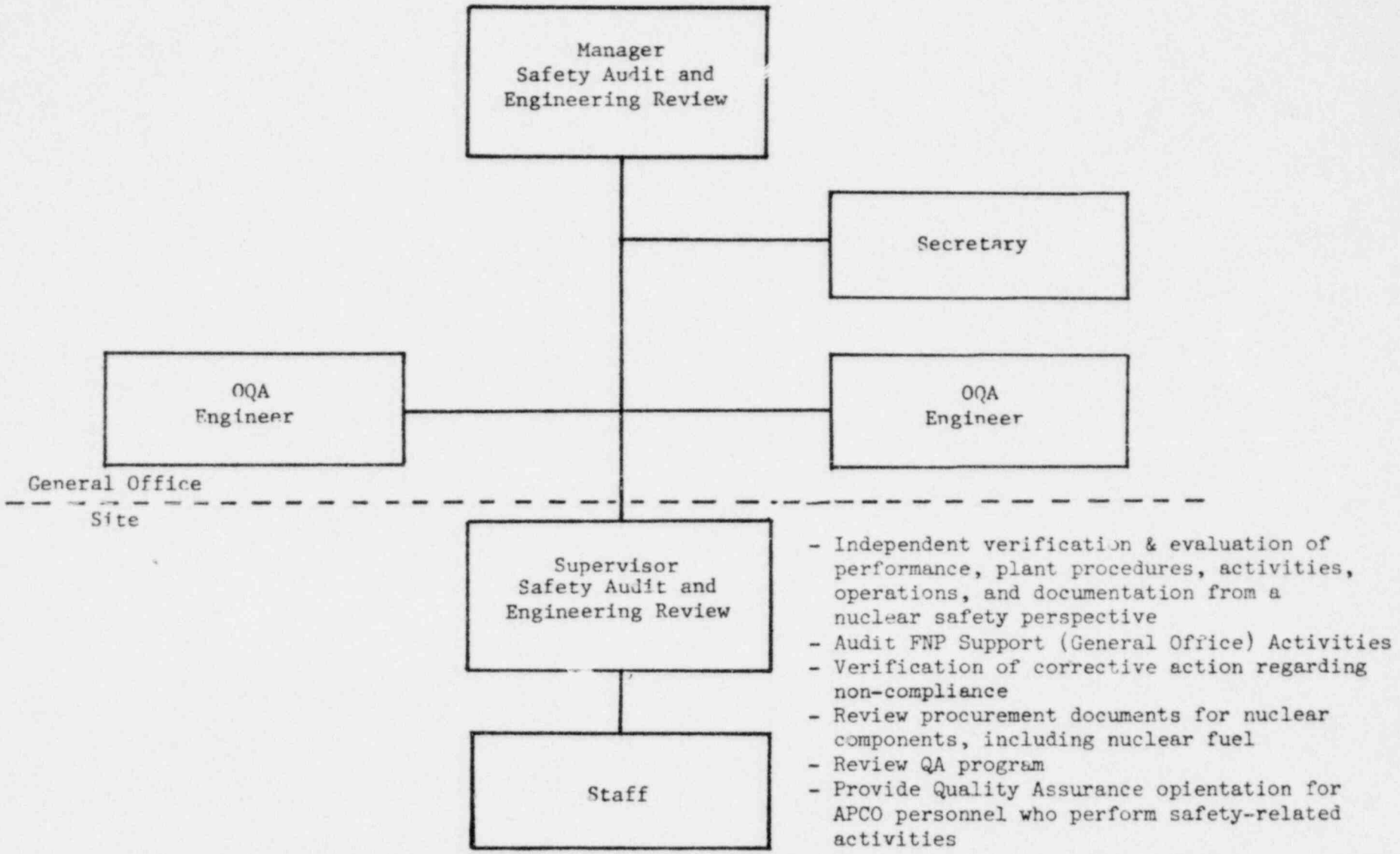
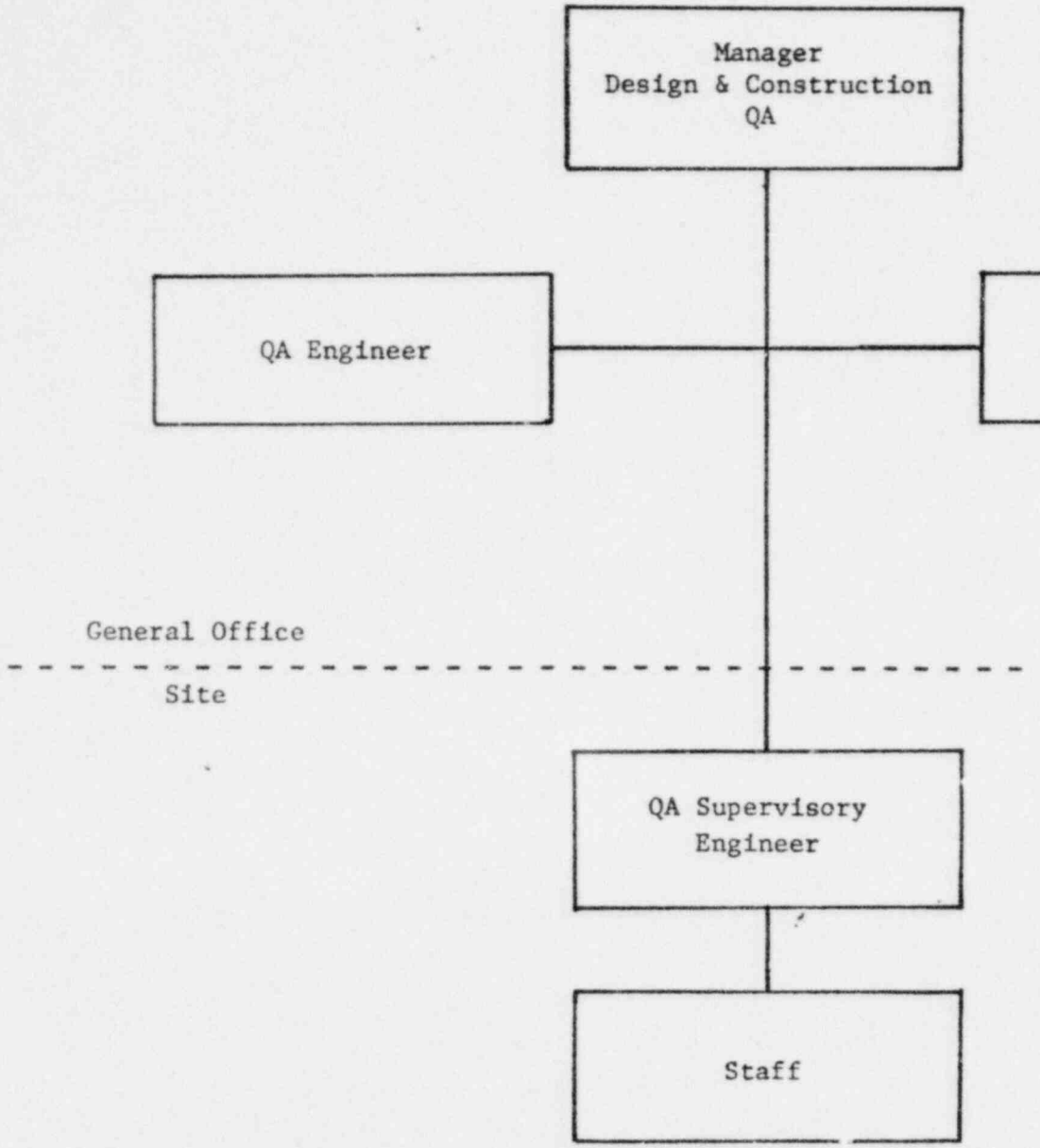


FIGURE 12 D & C QUALITY ASSURANCE ORGANIZATION



- Surveillance of SCSI, Bechtel, and Daniel to Ensure Proper Implementation of QA Program Regarding
  - Design
  - Procurement
  - Document Control
  - Control of Purchased Equipment, Material and Services
  - Equipment Installation and Testing
  - Control of Measuring and Test Equipment
- Surveillance of APCo Construction, Procurement, and Engineering Services QA Activities
- Audit Specifications and Proposals
- Audit Vendor QA Programs
- Approve QC Procedures Developed by APCo Construction, Daniel, and Subcontractors
- Resolution Non-compliances with D&C QA Requirements

2. Resources of Offsite Support Staff

   a. The offsite technical support for Farley Nuclear Plant Unit 2 is conducted by two organizations, the offsite Nuclear Generation General Office Staff (Figure 2) and APCO's Southern Company affiliate (Figure 3) which interfaces directly with the Manager—Nuclear Engineering and Technical Support for licensing and design support.

   b. Alabama Power Company Offsite Support Organization

      i. Attachment 1 - Qualification Summaries for APCO Nuclear Generation Offsite Management and Supervisory Personnel.

      ii. Attachment 2 - APCO Offsite Support Group Qualification Summary Table.

   c. Southern Company Services, Inc. A/E and Licensing Support Organization

      i. Attachment 3 - Qualification Summaries for associated SCSI Management Personnel.

      ii. Attachment 4 - SCSI Licensing Support Group Qualification Summary Table.

      iii. Attachment 5 - SCSI Design Group Qualification Summary Table.

Attachment 1

Qualification Summaries

Alabama Power Company Nuclear Generation

Offsite Support Management

and Supervisory Personnel

Vice President
Nuclear Generation
P. McDonald

1. Functions, Responsibilities, and Authority

- Provides overall management of the Nuclear Generation Department and recommends to the Senior Vice President plans for selection, placement, accountabilities, and development of managerial personnel within the Nuclear Generation Department.

- Provides management and direction required to meet the objectives of the Nuclear Generation Department which includes the specific corporate responsibility for the coordination of design and construction of new nuclear power plants, continued safe and reliable operation of existing nuclear generating facilities, and certain fuel procurement functions. Provides managerial guidance to the four Nuclear Generation Department Section Managers which are:
  - Manager, Nuclear Engineering and Technical Support.
  - General Manager, Nuclear Generation.
  - Manager, Operations Quality Assurance.
  - Manager, Design and Construction Quality Assurance.

- Participates vertically and horizontally with members of management in formulating and recommending to senior officers certain improvements in Company policies, procedures, and practices affecting the Nuclear Generation Department and directing effective implementation of those approved in order to achieve the objectives of the Nuclear Generation Department.

- Approves and monitors cost, schedule, and quality aspects of activities performed by the Nuclear Generation Department.

- Serves as liaison with the responsible senior officer for advice and support involving legislative and regulatory acts affecting the Company's activities of the Nuclear Generation Department.

- Serves as member and Alternate Vice Chairman of the Nuclear Operations Review Board for Farley Nuclear Plant.

- Serves as member of the Southern Electric System Nuclear Safety Review Task Force.

2. Education Background:

- BS Degree in Engineering - U. S. Naval Academy.
- MS Degree in Foreign Affairs - G. W. University.
- Graduate of National War College.
- Graduate of U. S. Navy Advanced Nuclear Power School.
- Graduate of U. S. Navy Nuclear Power Prototype Training School.
- Reactor Systems and Control Theory in Pressurized Water Reactor Plants - Bettis Laboratory.
- Qualified through training as Chief Reactor Operator and Chief Reactor Technician for S1W Nuclear Prototype Plant.
- Qualified as Chief Operator for the S3G Nuclear Prototype Plant.
- Qualified as Shipboard Engineering Officer for Nuclear Power Plants.
- Qualified as Shipboard Commanding Officer for U. S. Navy Nuclear Power Plants.

(Above naval qualifications obtained based on written and oral examination process.)

3. Experience Background:

- Reactor Control Officer - S3G Prototype, U. S. Navy.
- Reactor Control Officer - Submarine U.S.S. Triton utilizing two General Electric S3G Pressurized Water Reactor Power Plants.
- Engineering Officer for a Westinghouse S5W Pressurized Water Reactor Power Plant in a nuclear submarine.
- Executive Officer for an S5W Power Plant in a nuclear submarine.
- Commanding Officer for two S5W Power Plants in submarines.
- Squadron Commander of Submarines using S5W Power Plants and a Nuclear Repair ship capable of repairing S5W Plants.

- Naval experience in handling failure situations, studies and evaluations with the objective of preventing or controlling radioactive releases.

- Naval experience in examination for adequacy of material, procedures, and personnel performance for Nuclear Power Plants.

- Served in Office of the Chief of Naval Operations in conjunction with the Polaris, Poseidon and Trident Missile Programs on Nuclear Submarines.

- Served as Manager - Operations Quality Assurance (for nuclear section) at Alabama Power Company for three years.

- Vice President—Power Supply Services in charge of design projects, environmental licensing, and quality assurance associated with fossil, hydro, and nuclear plants.

General Manager
Nuclear Generation

1. Functions, Responsibilities, and Authority

Provides managerial guidance and direction for:

- All onsite operations, engineering, and support activities involved in safe and efficient operation of Alabama Power Company's nuclear facilities.

- Development, implementation, and continuing fulfillment of plans, policies, and procedures for plant operation.

- Production of electricity for the system in a safe, reliable, and efficient manner while conforming with the regulations imposed by federal, state, and local governmental agencies.

- Administration of department business plan, training program, IBEW contract, contingency plans, document control, manpower plans.

- Planning and resource management activities related to departmental budget, business plan, procurement control, daily status and problem reports, plant security, generation and outage scheduling, design change reviews.

- Regulatory and procedural controls including FSAR and license change reviews, coordination of corrective actions and review of LER's, plant and section inputs for NORB reviews, emergency planning, ALARA program and radiation exposure reviews.

2. Educational Background

- BSME, Auburn University, 1956

- One semester course "Nuclear Reactors", University of Alabama, Birmingham.

- Six month Nuclear Training Program conducted by the University of Alabama, Tuscaloosa.

- Short Courses,

  a. "Nuclear Power Plant Inspection and Quality Assurance During Operation" - Southwest Research Institute.

b. "Symposium on Training of Nuclear Personnel" - Oak Ridge National Laboratories and American Nuclear Society.

c. "Fundamentals of Nuclear Power Generation", Westinghouse Corporation Training Center, Zion, Illinois.

3. Experience Background

- Engineer, Construction, Alabama Power Company. Directed startup activities and equipment installation of a 250 MW fossil-fueled power plant.

- Laboratory Foreman, Production.

- Supervisor of Performance and Controls, Production.

- Senior Engineer, Production, General Office.

- Assistant Superintendent, Steam Generation. Responsible for the coordination of supervision of fossil plant operations and maintenance.

- Superintendent, Nuclear Generation. Responsible for the supervision of preoperation, operation, modification, and maintenance for APCo. nuclear plants.

- General Manager, Nuclear Generation

Manager
Nuclear Engineering and Technical Support

O. D. Kingsley

1. Functions, Responsibilities, and Authority

Provides managerial guidance and direction for:

- Engineering and Technical Support related to plant design and licensing activities.
- Plant design changes, modifications, and additions.
- Environmental monitoring and emergency plan technical support.
- Chemistry and health physics technical support.
- Nuclear fuel cycle management, budgeting, and expenditure controls.
- Contracts management.
- Section business plan development.
- Special nuclear material control.
- Engineered and technical aspects of procurement expediting, maintenance, and special inspection, testing, and operational problem analyses in support of the plant operation.
- Acts on behalf of the General Manager—Nuclear Generation during absences by that position.

2. Education Background

- BS in Engineering Physics, Auburn University.
- Six months, U. S. Navy Nuclear Submarine prototype training, Officers Course, S-1-C Prototype, Windsor, Connecticut.
- Six months, U. S. Navy Submarine School, Officers Course, Groton, Connecticut.
- One month, U. S. Navy Nuclear Weapons Safety, Officers Course, Norfolk, Virginia.

- Westinghouse Training: Zion Training Center, Zion, Illinois.

    1. Fundamental nuclear reactor training (completed October, 1972)

    2. Operating PWR observation (completed December, 1972)

    3. Simulator training (completed February, 1973)

    4. Design lecture series

- Westinghouse Onsite Training

3. Experience Background

- U. S. Navy.

- Senior Engineer II, Production, Alabama Power Company. Responsibilities included review of equipment specifications, proposals, plant design, and the PSAR for Farley Nuclear Plant. Participated as an engineer in the cold hydrostatic, preoperational, hot functional, containment leakage, fuel loading, initial criticality, and zero power test programs at VEPCo's Surry Unit 1.

- Development of Plant Farley training program, coordination of plant staffing, and the conduct of Operations section of the FSAR.

- Assistant Plant Manager, Farley Nuclear Plant, responsible for coordination of startup and commercial operation of Farley Nuclear Plant.

- Plant Manager, Farley Nuclear Plant.

- Assistant Manager, Nuclear Generation.

- Manager, Nuclear Engineering and Technical Support.

Manager
Safety Audit and Engineering Review

1. Functions, Responsibilities, and Authority

Provides overall management and guidance for implementation of Safety Audit and Engineering Review activities which include:

- Independent verification and evaluation of performance, plant procedures, activities, operations, and documentation from a nuclear safety perspective
- Audit FNP Support (General Office) Activities
- Verification of corrective action regarding non-compliance
- Review procurement documents for nuclear components, including nuclear fuel
- Review QA program
- Provide Quality Assurance opientation for APCo personnel who perform safety-related activities

2. Educational Background

- BSEE, N. C. State University, 1966
- MSEE, N. C. State University, 1967
- U. S. Navy Submarine School
- U. S. Navy Basic Nuclear Power School
- U. S. Navy Nuclear Power Training Unit, Bettis Atomic Power Laboratory
- Officer Candidate School, U. S. Navy

3. Experience Background

- Director Officer Department Naval Nuclear Power School - Head of the Officer Department at Naval Nuclear Power School, Orlando, Florida. Directly supervised 30 Nuclear Trained Instructors who taught seven different subjects to officers selected for training in the Nuclear Power Program.

  Supervised training of staff personnel and approved assignment of instructors. Monitored classroom presentations for compliance with approved curriculum and adequacy of instruction; continued review of subjects for technical improvement.

  Supervised military and academic performance of officer students. Directed liaison with Naval Reactors and Westinghouse concerning matters of technical nature.

- Assigned as Assistant to Deputy for training for Submarine Squadron Four, Charleston, South Carolina. Monitored ships within squadron to determine the state of readiness of the Nuclear Propulsion Plant by evaluating ships training and conducting extensive records review. Assisted Squadron Engineer on technical problems concerning nuclear propulsion plants for ships in squadron.

- Engineer Officer, Nuclear Power Submarines - Engineering officer aboard nuclear powered fast attack submarine. Ship conducted several independent operations of up to 100 days with no outside support and no major equipment malfunctions.

  Conducted Pre-Overhaul Tests in preparation for refueling overhaul in Charleston Naval Shipyard. Eighteen (18) month overhaul was completed in 14½ months, and Engineering Department was awarded the Engineering E from Squadron Four for this accomplishment.

  Planned, coordinated and directed work of eight degreed engineers and sixty highly-skilled technicians to meet all refueling overhaul objectives ahead of schedule. Worked closely with shipyard construction managers, reactor plant prime contractors, government regulatory personnel and subcontractors in management of shipboard construction and testing.

  Sucessfully completed two ORSE and one pre-critical examinations. Never failed any Engineering examination (Preventative Maintenance Supplement/Sub Safe/Radiation Health/Quality Assurance/Supply/etc.) during tour.

- Served with Submarine Force U. S. Pacific Fleet. In this capacity was a member of the Pre-Operational Reactors Safeguards Examination Board. Examined records, conducted drills on various units of the Pacific Fleet.

- Minority Affairs Officer -
Officer originally appointed to position of Minority Affairs Officer. Originated, drafted and implemented directives concerning actions by all levels of Force with respect to proper recognition of and required actions concerning minority groups.

- Drug Abuse Officer -
Drafted Force directive concerning administrative aspects of drug abuse within the Submarine Force. Action came as result of major revision to Navy's policy concerning drug abuse. Unique situations within the Submarine Force concerning handling of Nuclear Weapons and Operation of Nuclear Reactors required special administrative procedures. Policy within this directive was adopted by other major commands.

- Retention Officer -
Opened direct lines of communication from Force Commander to junior personnel. Visited numerous commands and engaged young officer and enlisted personnel in detailed conversations regarding real and perceived problems.

- Fleet Ballistic Missile (SSBN) Material Officer -
Officer responsible for authorizing work to be accomplished on Fleet Ballistic Missile nuclear submarines undergoing overhaul. Direct management of funds in excess of $30,000,000.00 per ship.

  Liaison with Naval Ship Systems Command, Naval Reactors, and other technical agencies to provide support of nuclear and ballistic missile areas.

- Engineering Department Division Officer -
Served as Main Propulsion Assistant and as Electrical Officer in a Nuclear Powered Submarine.

- Received a masters degree from N. C. State University in four years while participating in a Navy scholarship program.

- Completed 10 years of enlisted service in the U. S. Navy. Accomplishments during that time frame were attainment of the level of Chief Electronics Technician, Qualified Reactor Operator during the new construction program of the USS Barb (SSN653), while Senior Electronics Technician aboard the USS Henrico (APA45) supervised an extensive electronics backfit package during shipyard overhaul.

Manager
Design and Construction (D & C) Quality Assurance

1. Functions, Responsibilities, and Authority

Provides managerial guidance and direction for implementation of the Farley Nuclear Plant Design and Construction QA program which includes:

- Surveillance of SCSI, Bechtel, and Daniel to ensure proper implementation of QA Program regarding
  - Design
  - Procurement
  - Document Control
  - Control of Purchased Equipment, Material and Services
  - Equipment Installation and Testing
  - Control of Measuring and Test Equipment

- Surveillance of APCo Construction, Procurement, and Engineering Services QA Activities.

- Audit of Specifications and Proposals.

- Audit of Vendor QA Programs.

- Approval of QC Pr s developed \PCo Construction, Daniel, and subco. .ctors.

- Resolution of Non-compliances with D&C QA requirements.

2. Educational Background

- BSCE, Auburn University.

- Registered Professional Engineer, State of Alabama.

3. Experience Background

- Fireman 1st Class, U. S. Navy.

- Engineering Aid, Engineering and Construction, Alabama Power Company, General Office.

- Junior Engineer, Engineering and Construction, General Office.

- Engineer II, Engineering and Construction, General Office.

- Engineer II, Construction, Weiss Dam Project and Lock 3 Project.

- Engineer I, Construction, Bouldin Dam Project and General Office.

- Senior Engineer II Supervisory, Engineering, General Office.

- Staff Engineer Quality Assurance, Engineering, General Office.

- Supervising Engineer Quality Assurance, Engineering, General Office and Farley Nuclear Plant.

- Quality Assurance Supervisor, Farley Nuclear Plant.

- Manager, Quality Assurance (D&C), General Office.

Superintendent

Nuclear Licensing & Design Support

1. Functions, Responsibilities, and Authority

   Provides guidance, direction, and coordination for:

   - Development, review, and approval of all design changes and modifications developed by offsite personnel.

   - Engineered procurement associated with design changes and modifications.

   - Outage design support.

   - Maintenance coordination of NRC Operating Licenses.

   - Response to NRC licensing requests such as bulletins, circulars, notices and letters of request for information.

   - Technical Support for engineering and licensing projects.

2. Educational Background

   - BSAE, Auburn University, 1967.

   - MSAE, Auburn University, 1968.

   - Alabama Power Company Welding/NDE Training Course.

   - G. E. BWR Systems Course (one month)

   - FNP Reactor Theory Course.

3. Experience Background

   - Research Engineer, Rohm & Haas Corporation. Coordinated engineering evaluations and testing programs related to applied thermodynamic problems.

   - Thermal Analyst, Combustion Engineering. Performed thermal and stress analyses of nuclear steam supply components under normal and accident conditions.

- Senior Engineer, Alabama Power Company. Provided technical support pertaining to testing, startup, operation, and maintenance of the FNP.

- Operations Quality Assurance Engineer, Alabama Power Company. Assisted in development and implementation of a quality assurance program for design, procurement, installation, testing, and operation of the FNP.

- Supervisor - Nuclear Projects, Alabama Power Company. Provided supervision and coordination of design related projects including engineering procurement associated with changes, new projects, and modification of the FNP.

Superintendent
PLANNING & RESOURCE MANAGEMENT

1. Functions, Responsibilities, and Authority

Provide management of department and section planning and resources. This includes:

- Department Budget
- Section business plan
- Invoice review and approval
- Furniture and automotive budgets
- Management of stores, inventory, purchasing methods, and procedure controls
- Daily status reports
- Problem reports
- Responses to surveys
- Security plan
- Generation and outage scheduling
- Design change review for approval
- Coordination of department insurance matters

2. Educational Background

- B.S.M.E., University of Alabama, 1969
- Six (6) months Nuclear Power Engineering Course, University of Alabama
- BWRG Operation Course
- ASME Section IV Nuclear Power Plant Maintenance Course

3. Experience Background

- Junior Engineer - Alabama Power Company - 6/69 thru 1/72. Responsible for training and becoming familiar with all phases of fossil fueled power plant operation and maintenance. Duties consisted of writing various power plant reports and procedures, and assisting in the performance of operational tests on equipment and systems. Placed in charge of a startup group that was responsible

for writing detailed equipment checkout procedures, implementation of those procedures and recording preoperational data during the startup of two 700 MW supercritical fossil fueled power generation units.

- Generating Plant Engineer - Alabama Power Company - 1/72 thru 7/72
Responsible for the total design of several plant modifications, writing plant performance reports for management and regulatory agencies, obtaining plant performance data, determining equipment efficiencies and performing critical data collection. In charge of the onsite Operation Personnel Training Program for a 700 MW supercritical fossil fueled power generation unit.

- Senior Engineer II - Nuclear Production - Alabama Power Company - 7/72 thru 2/73
Responsible for the following: preparing sections of NRC Safety Analysis Reports; evaluating nuclear plant bid lists, specifications for equipment and materials and vendor proposals; evaluating the design of a PWR nuclear plant; assisting in the solution of problems pertaining to preoperational testing, startup, operation, maintenance, inspections and scheduling; and other operational or administrative matters assigned by the Manager-Nuclear Generation.

- Senior Engineer I - Nuclear Production - Alabama Power Company - 2/73 thru 1/78
Responsible for the following: coordinating activities in operation, maintenance, and nuclear fuel management; approving procurement documents for safety-related parts, materials, supplies, and equipment; evaluating proposals for plant parts, supplies and services; writing procedures for the Production Nuclear Section; performing design reviews; assisting in licensing matters; handling QA problems with administrative controls;and assisting the Manager-Nuclear Generation with matters of budgeting, labor problems, and general administration of a nuclear power plant.

- Supervisor I - Nuclear Production - Alabama Power Company - 1/78 thru 6/80
During the period of 1/78 thru 2/80, responsible for the following: coordinating activities in operation, maintenance, and the nuclear fuel management, approving procurement documents for safety-related parts, materials, supplies, and equipment; evaluating proposals for plant parts, supplies and services; writing procedures for the Production Nuclear Section; performing design reviews; assisting in licensing matters; handling QA problems with administrative controls; and assisting the Manager-Nuclear Generation with matters of budgeting, labor problems, and general administration of a nuclear power plant.

Environmental and Health Physics Coordinator

1. Functions, Responsibilities, and Authority

   Provides coordination of Farley Nuclear Plant Environmental and Health Physics activities which includes:

   - Radiological Environmental Monitoring Management.
   - NRC/NPDES/AWIC Reporting Coordination.
   - Water Chemistry Technical Support.
   - Radiochemistry Technical Support.
   - Special Studies.
   - Emergency Plan Technical Support.

2. Educational Background

   - BS in Chemistry, University of Alabama, 1950.
   - MS in Chemistry, University of Tennessee, 1952.
   - Ph.D. in Chemistry, University of Tennessee, 1953.
   - M.S. in Industrial Management, University of Tennessee, 1960.
   - Certified Member of the American Board of Health Physics.

3. Experience Background

   - Chemist, Goodyear Atomic Corporation. Engaged in gaseous diffusion technology.
   - Research Chemist, Union Carbide, Oak Ridge, National Lab. Participated in isotope separation research.
   - Research Group Leader, Diamond Shamrock Corporation. Responsible for Design and manufacture of enriched nuclear fuel particles for the U. S. Navy.

- Nuclear Safety Officer, Diamond Shamrock Corporation. Responsible for reviewing the Naval fuel particle fabrication and liasion with the AEC to obtain a special nuclear material license.

- Senior Scientist, Oak Ridge Associated Universities. Taught courses in health physics for state regulatory personnel. Responsible for the technical program for design and manufacture of gamma irradiators and the associated health physics program.

- Chief Chemist, Alabama Power Company.

- Environmental and Health Physics Coordinator, Alabama Power Company.

Supervisor
Nuclear Fuel and Contracts

1. Functions, Responsibilities, and Authority

   Coordination and implementation of Farley Nuclear Plant nuclear fuel activities and special nuclear materials control which includes:

   - Nuclear Fuel Cycle Management.
   - Nuclear Fuel Budgeting and Expenditure Control.
   - AE Support Contract Administration.
   - Engineering Work Order (EWO) Administration.
   - DOE Correspondence Coordination.
   - Department Lawsuit Support.
   - Section Business Plan.
   - Section Training.

2. Educational Background

   - Bachelor of Science Degree, Nuclear Engineering, Mississippi State University, 1969.
   - Master of Science Degree, Nuclear Engineering, Mississippi State University, 1970.

3. Experience Background

   - United States Marine Corps 1963-1966. Field radio operator in 10th Marines (Artillery).
   - Mississippi State University 1969-1970 Graduate Assistant.
   - 1970-1975 - Engineer (various classifications) Generating Plant Technical Services - Design Liaison Section. Duties included coordination within APCo of review and approval of design documents, equipment purchases and SAR Draft Material for Farley Nuclear Plant.

- 1975-1978 - Supervising Engineer - Generating Plant Technical Services - Fossil and Nuclear Section. Nuclear Section duties included nuclear plant design liaison and coordination of Nuclear Licensing Activities within APCo.

- 1978 - Supervisor-Nuclear Fuel and Contracts. Duties include inter- and intra-company coordination of all offsite nuclear fuel activities and special nuclear material control.

Superintendent
Regulatory and Procedural Controls

1. Functions, Responsibilities, and Authority

Supervises and provides guidance to a staff of engineers for implementation of the following activities:

- Department, Section, and Plant Procedural Guidance.
- Standards, Regulatory Guides, and Federal Register Review and Action Coordination.
- FSAR and License Change Reviews
- Corrective Action (including OQA & NRD Noncompliances).
- Coordination of Review and Correspondence on License Event Reports.
- Coordination of Plant and Section Inputs for NORB Review.
- Emergency Plan Upgrades and Maintenance.
- ALARA (As Low As Reasonably Achievable) Program.
- Corporate Radiation Exposure Reviews.

2. Educational Background

- BSEE, Stanford University, 1964.
- Nuclear Power School, U. S. Navy.
- Officer Candidate School, U. S. Navy.
- Submarine School, U. S. Navy.
- Nuclear Weapons School, U. S. Navy.

3. Experience Background

- Electrician, U. S. Navy.

- Operator, Submarine, U. S. Navy.

- Electronics Material Officer responsible for electronic equipment maintenance on a Navy destroyer.

- Assistant Plans Officer at Submarine Base, New London, Connecticut, responsible for supervising and coordinating unusual or difficult repair jobs on diesel and nuclear submarines.

- Electronics Material Officer and Engineer Officer on a diesel submarine responsible for operation and maintenance of all electronic equipment, electrical systems, propulsion system and auxiliary equipment.

- Executive Officer, Navy training submarine.

- Commanding Officer, Navy training submarine.

- Assistant Director, Submarine Training Department. Supervised 60 instructors and office staff, teaching the operation and maintenance of sophisticated submarine sonar systems.

- Senior Engineer I, Alabama Power Company, General Office Technical Support Staff.

- Supervisor, Operations Quality Assurance, Alabama Power Company.

ATTACHMENT 2

APCO OFFSITE SUPPORT GROUP QUALIFICATION SUMMARY TABLE

DEPARTMENTAL TITLE NUCLEAR GENERATION

SECTION TITLE GENERAL OFFICE

NO. OF MANAGERS(M) SUPERVISORS (S), ENGINEERS(E), OTHER PERSONNEL (O)				EDUCATIONAL BACKGROUND DEGREE, DESCRIPTION	NUMBER OF PERSONS	ENGINEERING EXPERIENCE	MAN-YEARS	TECHNICAL EXPERIENCE	*MAN-YEARS		SPECIAL TRAINING	NUMBER OF PERSONS
M	S	E	O						F	N		
5	5	11	3	B.S. Engineering Physics	1	1. Nuclear Power Field (Utility or Non-Utility)	168	Reactor Operations Training	23		SRO License	2
				B.S. Engineering	2	2. Engineering Management (Utility or Non-Utility, Supervisor and Above)	85	Initial Plant Startup and Testing	17	4	Electronics Technician School	1
				B.S. Physics	1	3. Total Utility Experience (Nuclear or Non-Nuclear)	146	Reactor Operations	43		Naval Nuclear Power School (Basic)	4
				B.S. Civil Engineering	3			Health Physics	19		Naval Nuclear Power School(Advanced)	2
				B.S. Nuclear Engineering	1			Systems Analysis	8		Naval Submarine School	3
				B.S. Chemistry	1			USNRC Inspection	4.5		Officer Candidate School	3
				B.S. Chemical Engineering	1			Nuclear Management	59		Reactor Systems and Control Theory-PWR Bettis Laboratory	2
				B.S. Aerospace Engineering	1			Nuclear Procurement	26		Naval Nuclear Power Prototype Training School	4
				B.S. Electrical Engineering	4			Licensing	28		Generic Test Alloys Used in Nuclear Power Applications	1
				B.S. Sanitary Engineering	1			Mechanical Engineering	26	11	Naval Nuclear Weapons School	2
				B.S. Mechanical Engineering	5			Fossil Startup		9.5	Westinghouse PWR Training-Zion, IL.	3
				B.S. Mathematics	1			Chemist	15		Other Nuclear Training Courses	4
				M.S. Mechanical Engineering	1			Electrical Engineer	23	9	Engineering Economy for Utilities	1
				M.S. Nuclear Engineering	2			Quality Assurance	19		ASME Nuclear Power Plant Maint.	1
				M.S. Electrical Engineering	1			Construction - Plant	1.5		On-Site Nuclear Training	7
				M.S. Aerospace Engineering	1			Civil Engineering		6	System Protection - Electrical Power	1
				M.S. Industrial Management	1			Thermal Hydraulics	4			
				M.S. Foreign Affairs	1			High Pressure & Cyrogenics		2.5		
				M.S. Business Admin.	2							

*(F) - Full-Time Nuclear Experience
(N) - Non-Nuclear Experience

Attachment 3

Qualification Summaries

Southern Company Services, Inc.

Architect/Engineering and Licensing

Support Management Personnel

Vice President
Southern Company Services, Inc.

1. Functions, Responsibilities, and Authority

Provides overall management of Southern Company Services Nuclear Power Section. Duties include:

- Technical and economic evaluation of nuclear reactor plants.
- Organization, supervision, and training of a nuclear power engineering staff.
- Supervision of work for safety, licensing, and fuel management for Southern Company nuclear plants.
- Remaining abreast of advanced power generation methods.
- Has served on the following boards and committees:
  - Technical and Engineering Committee and Economics Committee of APDA
  - Technical Committee and Board of Trustees of High Temperature Reactor Development Associates
  - Board of Trustees of Power Reactor Development Company
  - EEI's Nuclear Fuels Committee and Research Projects Committee
  - Power for the Southern Interstate Nuclear Board
  - Nuclear Committee of the Southern States Energy Board
  - Various groups and committees of the Atomic Industrial Forum
  - Chairman of EPRI's Nuclear Systems and Materials Committee
  - Chairman of EPRI's Nuclear Power Divisional Committee and Research Advisory Committee

2. Educational Background

- BSME, Georgia Institute of Technology, 1947
- BSEE, Georgia Institute of Technology, 1948
- MSEE, Georgia Institute of Technology, 1949
- Oak Ridge School of Reactor Technology, 1954

3. Experience Background

- Employeed by Commonwealth and Southern Corporation (predecessor of Southern Company Services, Inc.) in 1949. Work in the System Planning Department included planning of transmission system expansions, relay applications, and electrical engineering for power plants.
- Employed by General Electric Company in early 1951 and worked in Schenectady, New York, in the Analytical Engineering Division on transient analyses of transmission systems and equipment and in the Electric Utility Engineering Department on power generation applications.
- Returned to Southern Company Services, Inc. later in 1951 to work in the System Planning Department. Duties included studies of transmission system additions, transient analyses of power systems, lightning protection, and electrical design of power plants. Was also an instructor of physics, engineering mechanics, mechanical engineering courses at the Birmingham Center of the University of Alabama.
- Assigned by Southern Company Services, Inc. to Atomic Power Development Associates (APDA) in Detroit, Michigan, and worked there until 1959. Coordinated programs on effects of fissions on thermal conductivity of uranium alloys, mixing of coolant in fuel assemblies, and flow properties of settled beds and slurries for paste-type fast reactors. Performed the basic design of the blanket fuel assemblies of the Enrico Fermi fast breeder reactor and worked on reactor safety studies. Coordinated development of the conceptual design of the Enrico Fermi plant operating control system which required development of digital and analog simulations of the dynamic performance of the plant equipment and control system. Supervised the conversion of the analog simulator to an operator training simulator which included a mock-up of the Enrico Fermi Plant consoles and an instructor's console.

- In 1959, returned to Southern Company Services as Manager, Nuclear Power Section to organize nuclear power activities for The Southern Company system. In 1964, became Manager, Advanced Planning and Research, and in 1965 was promoted to Assistant to the President which included management of nuclear power activities.

- Promoted to Vice President in 1966.

Manager
Nuclear Safety & Licensing
Southern Company Servies, Inc.

1. Functions, Responsibilities, and Authority

Provides management and guidance for nuclear safety and licensing support for all Southern Company nuclear power plants. This includes:

- Nuclear core analysis
- Nuclear safety and licensing, both generic and project
- Nuclear core operation support
- Interfaces with NSSS vendors and plant A/E's for resolution of technical and licensing issues
- Servies as a member on various industry committees including:
  - · EPRI Systems and Material Task Force
  - · Technical Advisory Committee - Steam Generator Owner's Group and BWR Pipe Crack Owner's Group
  - · Alabama Power Company Nuclear Operations Review Board

2. Educational Background

- BS Chemical Engineering, Georgia Institute of Technology, 1964
- MS Nuclear Engineering, Georgia Institute of Technology, 1966
- April 1966 through August 1969 - Worked towards Ph.D. in Nuclear Engineering at Georgia Institute of Technology. Completed Conprehensive Examinations
- BWR Technology Course - 5 weeks
- BWR Simulator Training - 1 week
- PWR Technology Course - 5 weeks
- PWR Simulator Training - 1 week
- Power Plant Piping System Design - 1 week
- Probabilistic Risk Assessment - 1 week

3. Experience Background

- April 1976 to Present - Manager, Nuclear Safety and Licensing Department, Southern Company Services, Inc. Responsible for all licensing, core analysis, and core operation support for all Southern Company System Nuclear Power Plants performed by Southern Company Services, Inc.

- June 1973 to April 1976 - Manager, Licensing and Safety Analysis Section, Southern Company Services, Inc. Responsible for all licensing and safety analysis activities performed by Southern Company Services, Inc. for Southern Company System Nuclear Power Plants.

- February 1971 to June 1973 - Manager, Mechanical and Fluid System Evaluation Section, Nuclear Safety Department, Westinghouse Electric Corporation. Responsible for supervision of safety and licensing evaluation of all Westinghouse supplied mechanical components and fluid systems design on all nuclear power plants. Participated in various design review committees.

- September 1969 to February 1971 - Senior Licensing Engineer, Nuclear Department, Southern Company Services, Inc. Worked on licensing of Hatch, Farley, and Vogtle Nuclear Power Plants.

- 1967 to June 1969 - Instructor, Georgia Institute of Technology, Southern Technical School. Subjects taught - Physics, Chemistry, Mathematics, Fluid Mechanics, and Heat Transfer.

- 1965 to 1967 - Research Assistant, Georgia Institute of Technology, School of Nuclear Engineering.

Manager
Nuclear Plant Support Department, SCSI

1. Functions, Responsibilities, and Authority

Responsibilities include management and guidance required to provide nuclear plant design support as follows:

- Planning, coordinating, and controlling the design engineering activities required to support the commercially operating unit(s) at the Farley Nuclear Plant.

- Management and supervision of the four groups established to provide this engineering support. These four groups are:

  · Civil and Architectural Group

  · Electrical Group

  · Mechanical Group

  · Project Support

- Response to the operating companies' requests for studies and design changes which will effectively improve plant availability, reliability, and safety.

- Design and technical support for plant inspections and testing on demand, particularly during plant outages.

2. Educational Background

- B.S.C.E. University of Alabama, 1959

3. Experience Background

- February, 1959 - December, 1965: Southern Services
  Responsibilities included the development and checking of structural design and detail drawings required in the construction of fossil fueled power plants. Design of structures comprising the power plant complex.

- December, 1965 - June, 1967 - Continental Engineering, Ltd.
  Principal Engineer - Responsible for design of major structures in the plywood and fertilizer industries

- June, 1967 - April, 1968 - Jervis B. Webb
  Senior Engineer - Responsible for the design of bulk material handling systems, primarily coal handling shstems for power plants.

- April, 1968 - August, 1971 - Rust Engineering
  Senior Engineer - Responsible for the design of major structures in the pump and paper industry.

- August, 1971 - Present - Southern Company Services, Inc. Assigned to the Nuclear Concrete Department - Project Engineer for the Farley Project, balance of plant, for seven years; title of Project Engineering Manager, Farley Unit 2 in September 1979; Title of Manager-Nuclear Plant Support Department-Farley in February 1980, which is position presently held.

ATTACHMENT 4

SCSI LICENSING SUPPORT GROUP QUALIFICATION SUMMARY TABLE

DEPARTMENT TITLE Nuclear Safety and Licensing

SECTION TITLE _____

Page _____ Of _____

NO. OF MANAGERS (M), SUPERVISORS (S), ENGINEERS (E), OTHER PERSONNEL (O)				EDUCATIONAL BACKGROUND DEGREE, DESCRIPTION	NUMBER OF PERSONS	ENGINEERING EXPERIENCE	MAN-YEARS	TECHNICAL EXPERIENCE	*MAN-YEARS		SPECIAL TRAINING	NUMBER OF PERSONS
M	S	E	O						F	N		
4		17	2	B.S. Engineering	1	1. NUCLEAR POWER FIELD (UTILITY OR NON-UTILITY)	127	1 REACTOR PHYSICS	35		Boiling Water Reactor Training Course	5
				B.S. Mechanical Eng.	3			2 ELECTRICAL ENGINEERING		3		
				B.S. Electrical Eng.	4			3 HEALTH PHYSICS	2	1		
				B.S. Aerospace Eng.	2	2. ENGINEERING MANAGEMENT (UTILITY OR NON-UTILITY, SUPERVISOR AND ABOVE)	35	4 MECHANICAL ENGINEERING	22	1	Introduction of Nuclear Power Course	5
				B.S. Physics	7			5 CIVIL AND ARCHITECTURAL				
				B.S. Math	1			6 INSTRUMENTATION/CONTROLS		3	Pressurized Water Reactor Training Course	7
				B.S. Chemical Eng.	1	3. TOTAL UTILITY EXPERIENCE (NUCLEAR OR NON-NUCLEAR)	134	7 HYDRO				
				B.S. Metallurgical Eng.	1			8 METALLURGICAL	2	1		
				B.S. Nuclear Eng.	3			9 LICENSING	69		Simulator Training	8
				B.S. Engineering	1			10 ENVIRONMENTAL	3		BWR Technology	1
				M.S. Mechanical Eng.	1			11 GEOLOGICAL			MIT Safety Course	1
				M.S. Electrical Eng.	4			OTHERS AS APPLICABLE:			Naval Nuclear Power School	1
				M.S. Nuclear Eng.	12			12 Waste Management		1		
				M.S. Physics	2			13 Safety Analysis		2		
				M.S. Engineering	1			14 Thermal Hydraulics		1	Naval Nuclear Power Prototype Training	1
				M.S. Civil Eng.	1			15 Procurement		7		
				Masters of Business Administration	1							
				Ph.D. Nuclear Eng.	2							

*(F) - FULL-TIME NUCLEAR EXPERIENCE
(N) - NON-NUCLEAR EXPERIENCE

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ATTACHMENT 5

NUCLEAR PLANT SUPPORT DEPARTMENT-FARLEY

PERSONNEL SUMMARY

June 18, 1980

	TOTAL	EXPERIENCE (YEARS) NUCLEAR	NON-NUCLEAR
ENGINEERS	16*	109	90
B.S.M.E.	9		
B.S.E.E.	7		
B.S.C.E.	3		
OTHER	11	35	28
	TOTAL YEARS EXPERIENCE	144	118

* SEVERAL ENGINEERS HAVE MORE THAN ONE DEGREE.

3. Management Official In Overall Charge of Nuclear Power

Provided in Section IV.

4. Safety Review Group

Provided in Section III.

5. Senior Management Oversite Group

The Nuclear Operations Review Board (NORB) is senior level oversight group which provides a means for management to be involved in nuclear power plant safety considerations and to assure that safety considerations are effectively applied to plant operational activities.

The NORB is comprised of senior knowledgeable management personnel. The group meets quarterly to perform, as a minimum, the following functions:

a. Provide oversight to activities performed by the Onsite Safety Review Group and other review groups.

Method: Reviews reports and meeting minutes of the Plant Operations Review Committee (PORC) and makes recommendations to the Senior Vice President concerning proper functioning of the PORC.

b. Review corrective actions and recommendations of the Onsite Safety Review Group and other review groups.

Method: Corrective Action

1) Reviews violation of codes, regulations, orders, Technical Specification, license requirements or of internal procedures or instructions having nuclear safety significance or abnormal degradation of systems designed to contain radioactive material.

Purpose: To confirm that the corrective action should significantly reduce the probability of recurrence.

2) Reviews all written reports concerning events requiring 24 hour notification to the NRC.

Purpose: To determine whether the reported action has been adequate and to confirm that the corrective action should significantly reduce the probability of recurrence.

3) Reviews audits of FNP corrective action performed by the Safety Audit & Engineering Review Group.

Purpose: To verify the adequacy of the plant corrective action mechanism.

Recommendation of the PORC

1) Reviews PORC recommendations concerning changes to procedures, equipment, systems, and proposed tests and experiments which involve an unreviewed safety question as defined in Section 50.59 10 CFR.

Purpose: To verify that the proposed changes do involve unreviewed safety questions and to confirm advisability of proposed changes.

2) Reviews PORC recommendations concerning proposed changes to Technical Specifications or the Operating License.

Purpose: To confirm advisability of proposed changes.

3) Reviews PORC recommendations concerning safety evaluations for proposed 1) procedures; 2) changes to procedures, equipment or systems; and 3) test or experiments completed under the provision of Section 50.59 10 CFR, to verify that such actions did not constitute and unreviewed safety question.

Purpose: To verify that such actions do not constitute unreviewed safety questions and proper action by PORC.

c. Assure, as appropriate, that corrective actions and recommendations of the Onsite Safety Review Group and other review groups are effectively implemented.

Method: The NORB verifies, by review of Safety Audit & Engineering Group audits and subsequent PORC minutes and reports, that PORC recommendations and approved corrective actions are implemented.

6. Training For Offsite Technical Support Personnel

a. Annual

1) Quality assurance.

2) Role in emergency response.

3) Health physics.

4) Security.

b. Routine

As a necessary part of day-to-day activities, the following are encountered on a routine basis:

1) Federal reguations applicable to the FNP.

2) Current FNP design and changes to design.

3) State of art in each person's area of expertise.

4) Licensee Event Reports associated with the FNP.

7. Outside Contractural Assistance

a. Bechtel Power Corporation

1) Provide Architect Engineering support of Farley Nuclear Plant as requested.

- New concept design (including drawings, specifications, safety reviews, etc.)

- Modification design

- Engineering support for licensing issues

- Advisory capacity

2) Contracted to SCSI and interfaces directly with APCO Manager - Nuclear Engineering & Technical Support.

3) Interfaces with Westinghouse on assigned design/ licensing items which affect the NSSS.

b. Westinghouse

1) Nuclear Steam Supply System supplier

2) Provide installation, testing, and corrective action assistance of NSSS scope of supply

3) Engineering support for licensing issues affecting the NSSS

4) New concepts design and modification design affecting NSSS

5) Advisory capacity

6) Engineering support related to operation, maintenance, and corrective action associated with the NSSS

7) Westinghouse support is provided through the Manager-Nuclear Engineering & Technical Support

c. Other Contractural Assistance

1) Other contractural assistance provided for specific areas as required (e.g. security consultant, pump vendor).

2) Assistance tailored to specific needs

3) This support handled through Plant Manager or Manager-Nuclear Engineering & Technical Support.

8. Applicable Codes and Standard Criteria to Offsite Staff

Alabama Power Company has established its current offsite management and technical staff in compliance with the guidelines of ANSI N 18.7-1972 and Regulatory Guide 1.33. Such guidelines establish provisions for administrative controls, assignment of authority and responsibilities, staffing policies, availability of qualified personnel, and areas of expertise.

B. CRITERIA FOR ACCIDENT CONDITIONS

Discussed in Section V.

III. Discuss the Independent Safety Engineering Group that is located onsite but reports to offsite management.

In order to provide thorough onsite safety review, Alabama Power Company has established a comprehensive system of reviews performed by the following groups shown in Figures 1 and 2:

A. The Systems Performance and Planning Group, which reports to plant management, is composed of persons in supervisory, engineering and technical capacities. This group is not functionally a part of the plant operations group. The systems performance group is a multi-disciplined group which has overview of all plant systems including mechanical, electrical and instrumentation and control. This group is dedicated to the operating experience assessment function.

B. The Plant Operations Review Committee (PORC), comp sed of key plant management personnel, advises and makes recommendations to the Plant Manager on matters a. ecting nuclear safety. Members of the PORC membership include the Plant Manager, Assistant Plant Manager, plant superintendents, and the Supervisor Safety Audit and Engineering Review (non-voting).

C. Operations Evaluation Teams, composed of highly trained and specialized personnel, are constituted by and report to the Vice President-Nuclear Generation to evaluation matters affecting the operation of the FNP.

D. The Safety Audit and Engineering Review Group (SAERG), which is independent of the FNP staff, is constituted of five multi-disciplined personnel who perform review functions and verification that other functions are performed correctly by other applicable groups. This onsite group reports to the Manager-Safety Audit and Engineering Review, who reports directly to the Vice President-Nuclear Generation.

Table 1 provides a list of review responsibilities with organization(s) indicated which are responsible for performing reviews. APCO utilizes several groups in its system designed for providing independent reviews. This system ensures that reviews are performed by competent and knowledgeable personnel who are not directly responsible for the activities while avoiding duplication of reviews or establishment of redundant organizations.

TABLE 1 - APCOs SYSTEM OF INDEPENDENT REVIEWS

REVIEW REQUIREMENT	REVIEW ORGANIZATIONS & REVIEW PURPOSE			
	System Performance & Planning Group	PORC	Operation Evaluation Teams	Safety Audit & Engineering Review Group
1. Review procedures and changes to procedures important to the safe operation of the FNP	Technical accuracy and clarity	Technical accuracy and clarity	Technical accuracy and clarity	Verification of adequate evaluation of technical accuracy and clarity
2. Review proposed tests and experiments	Technical advisability			Verify proper handling
3. Review changes and modifications to Unit systems and equipment	Technical advisability			Verify proper handling
4. Review Safety Evaluations for changes to procedures, equipment, or systems, or tests and experiments to verify that actions do not constitute unreviewed safety issues		Verify no unreviewed safety questions		Verify proper handling
5. Review changes, tests, or experiments which involve unreviewed safety issues		Recommend disposition and submittal to the offsite Nuclear Operations Review Board		Verify proper handling
6. Review changes to technical specifications		Recommendation of advisability		Verify proper handling
7. Review violations of technical specifications, including reports and recommendations to avoid recurrence		Recommendation concerning adequacy of reports and their conclusions		Verify proper handling
8. Review reports of violations of codes, regulations, orders, technical specifications, license requirements, and of internal procedures or instructions		Recommendation concerning adequacy of reports and their conclusions		Verify proper handling

TABLE 1 - APCOs SYSTEM OF INDEPENDENT REVIEWS (CONTINUED)

REVIEW REQUIREMENT	REVIEW ORGANIZATIONS & REVIEW PURPOSE			
	System Performance & Planning Group	PORC	Operation Evaluation Teams	Safety Audit & Engineering Review Group
9. Review reports of events requiring 24 hour reporting to the NRC		Recommendation concerning adequacy of reports and their conclusions		Verify proper handling
10. Review unit operations	Provide assessment of plant operations and operation of plants of similar design regarding their conformance to requirements related to safety and provide dissimination of assessment results to appropriate plant staff personnel	Detect potential safety hazards	Overall evaluation of plant operations from nuclear safety perspective	Audit operations assessment feedback. Participate in evaluation of plant operations from nuclear safety perspective.
11. Review reports of significant operating abnormalities, or deviations from normal or expected performance of plant equipment	Part of plant operation assessment described in 10 above	Recommendation concerning adequacy of reports and their conculsions	Part of overall evaluation of plant operations described in 10 above	Verify proper handling
12. Review unanticipated deficiencies in some aspect of design or operation	Part of plant operation assessment described in 10 above	Recommendation of problem resolution	Part of overall evaluation of plant operations described in 10 above	Verify proper handling
13. Review Security Plan and implementing procedures and recommend changes		Recommendation of advisability		Verify proper handling
14. Review Emergency Plan and implementing procedures and recommend changes		Recommendation of advisability		Verify proper handling
15. Review reports and meeting minutes of the PORC and provide oversight		Performed by NORB to determine proper functioning of the PORC		

TABLE 1 - APCOe SYSTEM OF INDEPENDENT REVIEWS (CONTINUED)

REVIEW REQUIREMENT	REVIEW ORGANIZATIONS & REVIEW PURPOSE			
	System Performance & Planning Group	PORC	Operation Evaluation Teams	Safety Audit & Engineering Review Group
16. Assure corrective action and recommendations are implemented				Verify proper implementation
17. Other reviews as requested by the NSEB		Part of charter responsibilities		As requested by the NORB Chairman
18. Assess Plant Staff Performance			Part of overall evaluations of plant operations and plant staff functions	Evaluation of personnel qualifications via audit of training and qualifications
19. Evaluate effectiveness of QA program				By Manager-Safety Audit and Engineering Evaluation by periodic audits by offsite staff, Joint Utility Management Audits, and annual formal summary of the Quality Assurance program performance
20. Evaluate operating experience of the unit and units of similar design	Part of plant operations assessment described in 10 above			

IV. Describe how the corporate official in overall charge of nuclear plant operations is actively involved in plant operational activities.

A. Establishment and approval of the qualification requirements for all plant staff positions.

Method: Review and final department approval of all job classifications within the Nuclear Generation Department. Each classification description includes qualification requirements. In addition, initial departmental restructuring required extensive review and evaluation of all job classification by the Vice President - Nuclear Generation.

B. The establishment and approval of qualification requirements for all offsite staff management positions that support safety related activities at the plant.

Method: Same as A. above.

C. The review of qualifications and certification of the qualifications of personnel assigned to plant staff positions in the categories of managers, lead professional-technical personnel and shift supervisors.

Method: The assignment with justification for all personnel in the Nuclear Generation Department is personally reviewed and approved by the Vice President - Nuclear Generation.

D. The establishment and supervision of functional units providing review of operational activities independent of the plant staff.

Method: 1) Management reports from General Manager - Nuclear Generation and their staffs

2) Operations Evaluation Teams

3) Safety Audit & Engineering Review Group

E. Concurrence with nuclear plant programmatic requirements established for the industrial security plan, quality assurance plan, fire protection program and plant staff training program.

Method: The Vice President - Nuclear Generation is the senior management approval for technical content of all plans developed, submitted, and implemented in accordance with regulatary requirements.

F. Periodic assessment of plant staff training and quality assurance programs.

Method: 1) Quality Assurance

- All audit reports are submitted to the Vice President—Nuclear Generation for review and action as appropriate.

- The Vice President—Nuclear Generation, initiates, reviews, and submits an annual assessment of the Quality Assurance Program.

- Continuing review of the Quality Assurance Programs effectiveness based on reports, consultation with operation and Q.A. management and assessment of overall plant conditions.

2) Training

- Reviews audits of plant staff training.

- Reports from offsite operations management concerning plant staff training.

- Personal observation of performance.

- Review of significant personnel performance inadequacies.

- Approval of certification of SRO and RO applications.

G. Review of NRC nuclear power plant inspection reports.

Method: The Vice President—Nuclear Generation reviews, evaluates, and directs responsive actions, as necessary, related to NRC nuclear power plant inspection report.

H. Reviews of deficiencies and violations of plant procedures and Technical Specification requirements, and concurrence with corrective action taken to preclude recurrence.

Method: The Vice President—Nuclear Generation:

1) Reviews, evaluates, and approves APCo response which describes necessary corrective action to all deficiencies and violations reportable to the NRC.

2) Approves proposed corrective actions in response to independent audits, inspections, and operational evaluations.

I. Active overall management of safety review groups that perform independent reviews of important matters affecting safety.

Method: The Vice President–Nuclear Generation

1) serves as Vice Chairman of the NORB

2) appoints and receives reports from Operation Evaluation Teams (described in Section VI).

3) has the Manager Safety Audit and Engineering Evaluation Manager and his organization reporting directly to him

3. Technical Support Director

- Reports to EOF in approximately 8 hours (He will proceed to the site after the Recovery Manager and Site Support Director arrive onsite.)

- Maintain communications with the plant from the general office until the Recovery Manager and Site Support Director arrive onsite.

- Manages and coordinates offsite organizations (APCO, Bechtel, Southern Company Services, Westinghouse, vendors, etc.) with respect to design and construction in support to the Site Support Director

4. Administrative Support Manager

- Reports to the EOF as directed by the Site Support Director

- Provides logistic and manpower support

- Coordinates contractual agreements with outside organizations in support of recovery

- Be available on a continuous basis after initial notification

5. Technical Support Manager

- Reports to EOF as directed by Technical Support Director

- Provides licensing support

- Coordinates design change review and implementation

- Coordinates the writing of emergency and contingency operating procedures

6. Radiological Support Manager

- Reports to EOF as directed by Technical Support Director

- Communicates with C & HP Supervisor on radiological monitoring and assessment

- Communicates with the State Dept. of Radiological Health concerning offsite exposure monitoring

- Coordinates activities of vendor monitoring activities

- Advises C & HP Supervisor concerning decontamination, sampling, and chenistry control

7. Public Information Manager

- Reports to EOF as directed by the Recovery Manager

- Communicates with the Recovery Manager and Site Support Director concerning press release information

D. Offsite Recovery Staff Resources

1. Appropriate portions of each manager's staff will be functioning within four hours after formal declaration of the accident.

2. Each manager's staff will provide shift support, as necessary, within 16 hours of formal declaration of the accident.

3. Each staff will be stationed at the location, in the judgement of each manager, where their functions may be best performed.

4. Qualifications and experience of offsite support personnel who serve in these capacities are provided in Section V.

E. Outside Assistance

1. Contractual

- Davcon - Maintenance & Repair
- Ft. Rucker - Transportation
- AAA Ambulance - Transportation
- Univ. of Alabama @ Birmingham (Hospital) - Medical
- Southeast Alabama Medical Center - Medical

2. Other

- Savannah River (Radiological Assistance Teams)
- Bechtel Corporation
- Westinghouse
- Daniel Construction Co. of Alabama
- Other utilities - INPO

F. Training

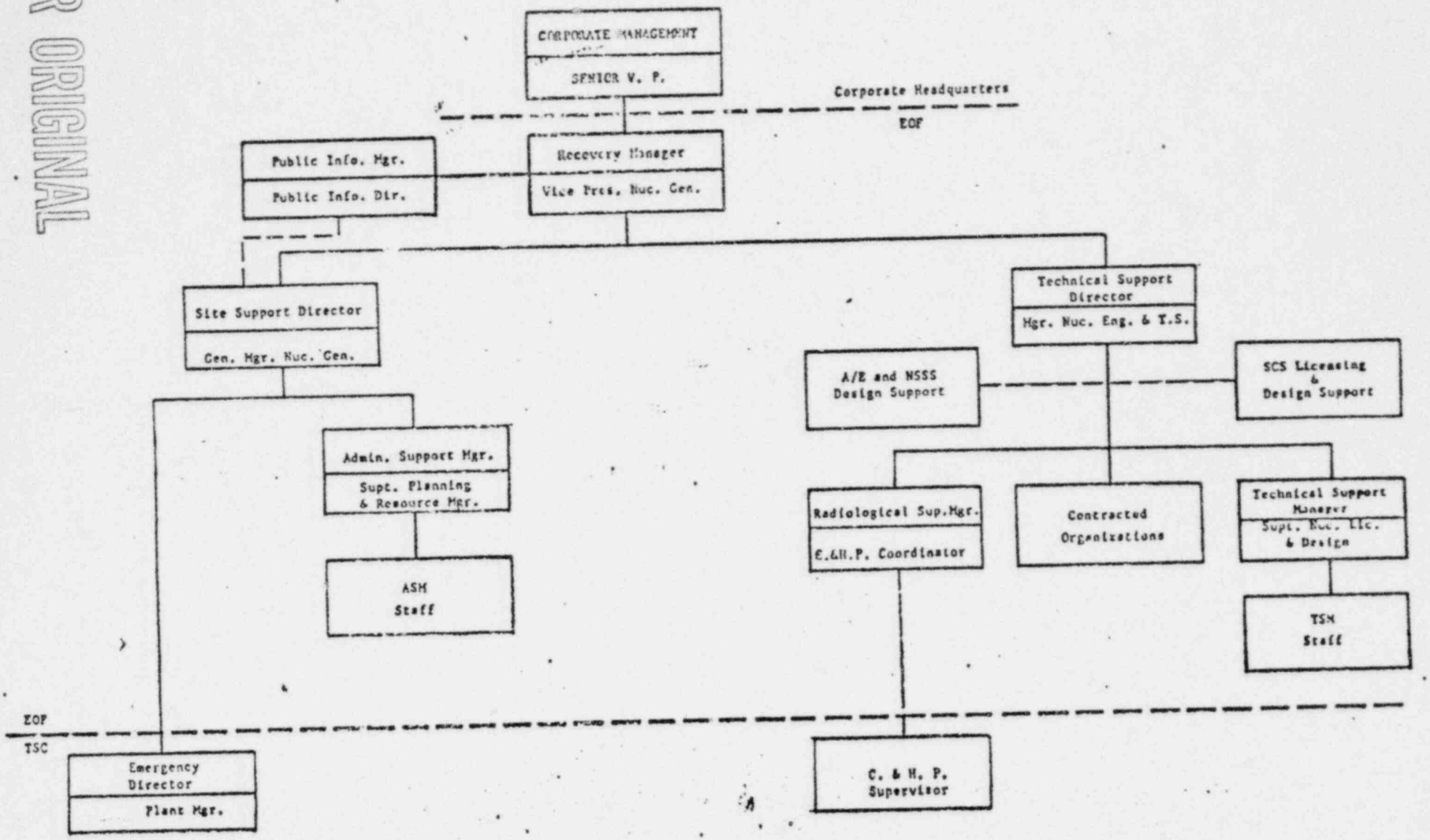
Annual orientation and communications drill will be held for principal elements of the out-of-plant recovery organization.

G. Procedures

Procedures will be written to direct activities in the following areas:

- Notification of offsite recovery organization including designation of alternates and contractual assistance.
- Description of how work assignments will be controlled, how information will pass between the TSC and EOF, and generally how the various groups will interact among themselves and with the plant.
- Description of how additional resources (equipment, supplies, manpower, space, etc.) will be made available.

Figure 13 - ALABAMA POWER COMPANY
OFFSITE RECOVERY ORGANIZATION



VI. Describe how operational experience from Farley Plants and other utilities, the NRC, INPO, etc., are obtained, reviewed and disseminated to plant operators.

Operational experience from Farley, other utilities, NRC, etc., are disseminated to plant operators by the following:

A. The operating experience assessment function is performed by the plant's System Performance Group (SPG).

B. The SPG is composed of a multi-disciplined group of supervisory, engineering and technical personnel.

C. The SPG performs and distributes, to appropriate plant staff, engineering evaluations of:

1. Plant operating history including:

a. equipment failures

b. design problems

c. operations errors

2. Licensee Event Reports from other similar plants and the FNP

3. NRC

a. Bulletins

b. Circulars

c. Notices

4. Adequacy of:

a. maintenance, testing and procurement policy

b. plant operations quality assurance

c. plant emergency and operating procedures

D. Plant superintendents/supervisors are the recipients of this information which is then distributed, as necessary, by the functional group superintendents/supervisors