NUCLEAR POWER

ORGANIZATION DESCRIPTION

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ABSTRACT

The TVA Nuclear Power Organization Description (TVA-NPOD89-A) includes organization descriptions for Nuclear Power (NP) including the organization descriptions for Browns Ferry, Sequoyah, Watts Bar, and Bellefonte Nuclear Plants. This report contains the senior management, technical support and operating organization descriptions and organization charts that meet the "content" guidance of NRC's Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants-LWR Edition, Rev. 3 (November 1978), Sections 12.1.1 and 12.1.2. The format of this report is similar to that provided in the format and content document; however, the section numbers do not begin with the chapter number (i.e., 13, 17).

Qualifications requirements and training descriptions specified in the standard format document will continue to be addressed in each plant's Final Safety Analysis report. The detailed TVA quality assurance organization and program description is contained in the TVA Nuclear Quality Assurance Plan (TVA-NQA-PLN89-A) and is not repeated herein.

INTRODUCTION

The purpose of the Nuclear Power Organization Description (TVA-NPOD89-A) is to establish a controlled single source document and a disciplined process for communicating organization structure and position descriptions to the Nuclear Regulatory Commission (NRC). TVA-NPOD89-A will be referenced in future revisions of our license applications including the Safety Analysis Reports (SARs), Technical Specifications (TSs), the Nuclear Quality Assurance Plan, and other documents that may refer to the Tennessee Valley Authority's Nuclear Power organization. This topical report will be revised as necessary to reflect major organizational changes and at least annually in accordance with the requirements of 10 CFR 50.71.

1.0 Corporate Organization

TVA is an agency of the Federal Government whose major policies, programs, and organization are determined by a full-time, three-member Board of Directors. Members of the Board are appointed by the President and confirmed by the Senate for nine-year terms. The Board of Directors is assisted by TVA's Executive Committee, which shapes long-term business strategies, recommends major program initiatives, and guides the day-to-day operations.

1.1 Nuclear Power

TVA's Nuclear Power organization is responsible for nuclear plant engineering and design, construction, operation, quality assurance, and compliance with regulatory requirements. Nuclear Power plans and manages the nuclear energy supply program to meet the requirements of TVA's power program consistent with safety, environmental, quality, and economic objectives. The general organization of Nuclear Power, TVA is shown in Figure 1-1.

1.2 Senior Vice President, Nuclear Power (NP)

The Senior Vice President, Nuclear Power is the senior nuclear manager with direct authority and responsibility for the management, control, and supervision of TVA's nuclear power program and for the execution of nuclear programs, policies, and decisions that the Board of Directors approves or adopts. The Senior Vice President reports directly to the President, Generating Group, and also reports to the TVA Board of Directors.

The Senior Vice President, Nuclear Power is responsible for the overall safety, efficiency, and economy of nuclear operations. The Senior Vice President establishes management and operating policies and procedures related to TVA's nuclear power program and is responsible for personnel, planning, scheduling, licensing, engineering and design, construction, operation, quality assurance, training, maintenance, technical and administrative matters related to that program. The Senior Vice President coordinates the activities and functions of Nuclear Power with other TVA organizations in order to carry out TVA corporate policy and to meet corporate goals and objectives. This position is responsible for all aspects of TVA's interface and relations with the United States Nuclear Regulatory Commission and other entities with jurisdiction over or interest in TVA's nuclear power program.

The Senior Vice President, Nuclear Power is responsible for the development and implementation of an effective radiological emergency preparedness program; directing shutdown of nuclear facilities when deemed appropriate; and the development of long-range strategic plans for all TVA nuclear programs, activities and facilities.

The Senior Vice President, Nuclear Power is assisted in carrying out these responsibilities by the Manager, Nuclear Business Operations; the Manager, Concerns Resolution Staff; the Manager of Nuclear Employee Relations & Development; the vice presidents of Nuclear Assurance, Licensing & Fuels; Nuclear Operations; Nuclear Projects; New Generation and Quality; Bellefonte Construction, and Completion Assurance.

The Senior Vice President, Nuclear Power, accomplishes the responsibilities through six vice presidents and three staff groups. The Vice Presidents' functions are described in sections 2.0 through 7.0. The staff groups are discussed below.

Nuclear Business Operations

The Manager, Nuclear Business Operations is responsible for developing, coordinating, and overseeing of a strong business and fiscal management program throughout Nuclear Power (NP) including business planning and budgeting. This manager also provides for the monitoring and reporting of NP goals and objectives.

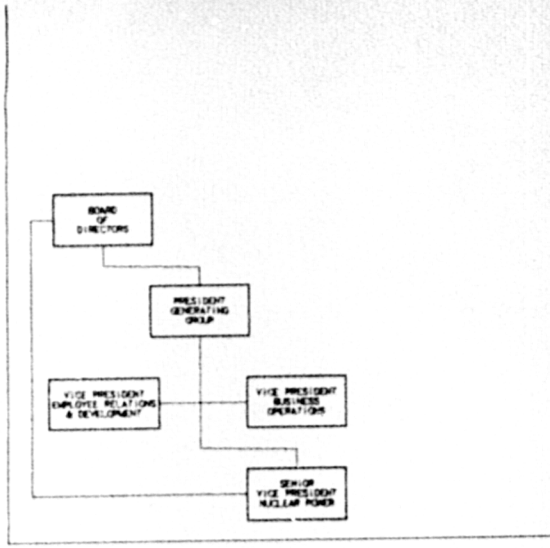
Concerns Resolution Staff

The Manager, Concerns Resolution, is responsible for developing, coordinating, directing, and managing a viable Concerns Resolution Program for NP. The Manager, Concerns Resolution has full-time site representatives at each nuclear site and the central office. Each location utilizes standard procedures, documentation and record keeping and contributes to a common data base of information regarding employee concerns. The Concerns Resolution Program provides employees with a means for reporting their concerns to a high-level within TVA's nuclear organization if, for any reason, the employees do not believe that their supervisors would properly respond to expressing of concern.

Nuclear Employee Relations & Development (NERD)

The Manager of Nuclear Employee Relations & Development is responsible for developing, coordinating, directing, and managing a viable human resources program for NP. Elements of the program include staffing and employment, compensation administration, labor relations, affirmative action and equal opportunity employment, employee communication, organization development, human resource policy and procedures development, management development and training; and ensuring suitability of employees service by the implementation of the Fitness for Duty Program. The Manager of NERD provides guidance and assistance to senior line managers and human resource specialists to ensure that TVA and NERD policies and standards are carried out in an efficient and effective manner.

NUCLEAR POWER



SENIOR VICE PRESIDENT NUCLEAR POWER

MANAGER, CONCERNS RESOLUTION STAFF

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

MANAGER, NUCLEAR BUSINESS OPERATIONS

VICE PRESIDENT COMPLETION ASSURANCE

VICE PRESIDENT NUCLEAR OPERATIONS

VICE PRESIDENT NUCLEAR PROJECTS

VICE PRESIDENT NEW GENERATION & QUALITY

VICE PRESIDENT NUCLEAR ASSURANCE, LICENSING & FUELS

VICE PRESIDENT BELLEFONTE CONSTRUCTION

FIGURE 1-1

TAG-FIG11

2.0 Vice President, Nuclear Assurance, Licensing, and Fuels (NAL&F)

The Vice President, NAL&F, is responsible for the general management and oversight of the programmatic activities of quality assurance, licensing, nuclear fuel, nuclear experience review, industry programs, Nuclear Reviews, Nuclear Safety Review Board, and Materials Contracts and Administrative Support. Management support to other organizations within NP is provided in the areas of nuclear procedures system, document control, and records management. In addition, NAL&F provides oversight coordination of reviews and evaluation of NP activities including quality performance.

The Vice President, NAL&F has five principal reports and accomplishes responsibilities through the following managers:

General Manager, Materials, Contracts, & Administrative Support
Manager, Nuclear Licensing & Regulatory Affairs
Manager, Nuclear Fuels
General Manager, Nuclear Assurance
Chairman, Nuclear Safety Review Board

See Figure 2-1 for NAL&F Organization Chart

2.1 Nuclear Assurance (NA)

The General Manager, NA, reports directly to the Vice President, NAL&F, and has an independent reporting relationship to the Senior Vice President and other vice presidents on quality matters. This is to ensure that the quality organization has direct access to appropriate levels of management and sufficient independence and organizational freedom to be able to effectively assure conformance to quality assurance program requirements. The General Manager, NA, also manages the Nuclear Reviews organization which is responsible for the Independent Safety Engineering function, the Nuclear Expense Review Program, and the Nuclear Safety Review Board Support.

The General Manager, NA, is responsible for:

2.1.1 Nuclear Assurance

A. Developing and administering the Nuclear Quality Assurance Plan and the NA organization procedures required to ensure that TVA activities provide the required degree of safety and reliability;

B. Auditing, inspecting, and monitoring the conduct of activities at Corporate, BLN, BFN, and SQN to ensure that they provide the required high degree of safety and reliability and are carried out consistent with applicable laws, regulations, regulatory commitments, licenses, and other requirements;

C. Performing assessments on a planned and periodic basis to comprehensively determine the effectiveness of the program and its implementation at Corporate, BLN, BFN, and SQN and submitting results of assessments to appropriate management;

D. Stopping work or further processing, delivery, or installation or taking other comparable actions when warranted to control and/or prevent the use of nonconforming materials or continuance of activities adverse to quality at Corporate, BLN, BFN, and SQN;

E. Establishing upper-tier QA requirements for QA training and for assessing the implementation and effectiveness of that training; and

F. Directing and managing the NA organization.

2.1.2 Nuclear Reviews (NR)

The Manager, Nuclear Reviews, reports to the General Manager, NA, and is responsible for the following activities:

A. Developing and implementing a review and evaluation program to assess activities associated with the design, construction, operation, and support of TVA's nuclear plants;

B. Providing an independent evaluation of the effectiveness of NP programs and their implementation;

C. Providing management and oversight of the internal and external operations experience review;

D. Periodically providing reports to senior management;

E. Performing the Independent Safety Engineering (ISE) function as set forth in NUREG 0737 including reviews, surveillances of plant activities and examinations of plant operating experience reviews;

F. Performing special assessments as requested by senior management; and

G. Providing procedural, technical, and administrative support to the NSRBs.

Descriptions of the NA Manager's organization and responsibilities are described in detail in TVA's Nuclear Quality Assurance Plan TVA-NQA-PLN 89-A.

2.2 Nuclear Licensing & Regulatory Affairs (NL&RA)

The Manager, NL&RA, reports to the Vice President, NAL&F, and is responsible for the following activities:

A. Serving as the principal interface with the NRC: provides information and interpretations concerning regulatory requirements; directs the preparation for and conduct of NRC audits, inspections and meetings; ensures the interpretation or resolution of NRC requests or imposed regulatory changes; and ensures compliance with NRC reporting requirements;

B. Establishing policy, procedures and oversight to maintain a licensing program for obtaining and maintaining required licenses and permits for new, recovering and operating nuclear plants;

C. Providing management and oversight of the generic issues and the corporate commitment tracking programs;

D. Ensuring resolution of NRC issues by developing action plans and managing implementation of those plans;

E. Managing the coordination of the NP interface with nuclear industry groups including INPO, EPRI, NUMARC, nuclear owner's groups, and other nuclear industry-wide programs; and

F. Managing and coordinating nuclear insurance programs and procedures.

2.3 Nuclear Fuels

The Manager, Nuclear Fuels, reports to the Vice President, NAL&F, and is responsible for the following:

A. Managing TVA nuclear fuel cycle activities (from uranium acquisition through spent fuel disposal) to supply fuel, fuel-related components, and services;

B. Providing support and technical direction to the nuclear sites for fuel utilization and nuclear fuel performance; and

C. Providing reactor core design and analysis including core-related transient and safety analysis.

2.4 Nuclear Safety Review Board (NSRB)

The Chairman, NSRB, is responsible for developing and implementing procedures consistent with NP policy and NRC requirements to conduct independent nuclear safety assessment and review of TVA's nuclear power plants. Individual safety review boards are in place for the Browns Ferry, Sequoyah, and Watts Bar Nuclear Plants. These boards are composed of senior TVA managers and advisors to the chairman who are not employed by TVA. The Chairman directs independent safety reviews of TVA's nuclear plants; manages the activities of the NSRB to ensure that responsibilities and functions are in accordance with appropriate Technical Specification requirements; and recommends plant safety improvements to the Senior Vice President. The Chairman or designee chairs each meeting of the NSRBs; approves and transmits minutes of NSRB meetings; and issues reports consistent with the NSRB charter.

2.5 Materials, Contracts, and Administrative Support (MC&AS)

The General Manager, MC&AS, is responsible for materials, corporate records, corporate policy and procedures, contracts and procurement, and acts as liaison with corporate information systems. The General Manager, MC&AS, has three direct reports and administers these responsibilities through the following managers:

Nuclear Materials Manager
Administrative Support and Procedures Manager
Contracts and Procurement Manager

The General Manager, MC&AS, also provides direction to the Senior Vice President's Central Staff.

2.5.1 Nuclear Materials

The Nuclear Materials Manager is responsible for development, coordination, and implementation of the materials management and procurement program for Nuclear Power. In addition, the Nuclear Materials Manager is responsible for the management of purchase orders for NP materials, Materials Data Base control, nuclear material classification, and the Nuclear Distribution Center. This manager is responsible for development of the materials inventory control and material application programs and provides support to and oversight of site implementation of these and other materials activities for Nuclear Power.

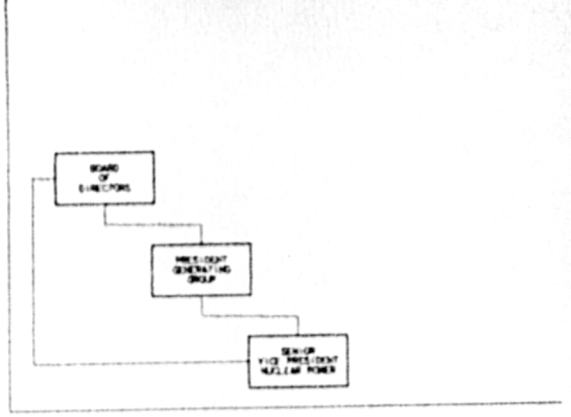
2.5.2 Administrative Support and Procedures (AS&P)

The AS&P Manager is responsible for the Corporate Nuclear Procedure System, Records Management, Central Emergency Control Center support, the Central Office document control records management unit, and Chattanooga Administrative Services. Support is provided to the site by developing policy for and establishing consistency in the plants by overseeing and maintaining a system of corporate-level procedures for site standardization. In addition, the AS&P Manager establishes and provides overall management and coordination of the Nuclear Power system of standards and business practices and acts as the liaison with corporate information systems.

2.5.3 Contracts and Procurement (C&P)

The Contracts and Procurement Manager is responsible for the development of contract policy including oversight and support to line organizations in the solicitation, negotiation, award, and administration of contracts for personal and professional services, including construction/installation services. The C&P Manager is also responsible for all specialty agreements such as user/owner groups and joint activity commercial endeavors. This manager provides oversight for line management adherence to contract policy.

NUCLEAR POWER ORGANIZATION CHART
NUCLEAR ASSURANCE, LICENSING AND FUELS



VICE PRESIDENT
NUCLEAR ASSURANCE,
LICENSING & FUELS

(~105)

GENERAL MANAGER,
MATERIALS, CONTRACTS
& ADMIN SUPPORT

- NUCLEAR MATERIALS
- NUCLEAR CONTRACTS & PROCUREMENT
- NUCLEAR PROCEDURES
- DOCUMENT CONTROL
- ADMINISTRATIVE SUPPORT

(~20)

MANAGER, NUCLEAR
LICENSING &
REGULATORY AFFAIRS

- LICENSING OVERSIGHT
- INDUSTRY PROGRAMS
- NUCLEAR INSURANCE

(~33)

MANAGER,
NUCLEAR
FUELS

- FUEL CYCLE MANAGEMENT
- URANIUM ASSESSMENT MANAGEMENT

(~242)

GENERAL MANAGER,
NUCLEAR
ASSURANCE

- QA
- QC
- SITE QA/QC
- NUCLEAR REVIEWS
- INDEPENDENT SAFETY ENGINEERING
- NUCLEAR EXPERIENCE REVIEWS
- NSRB SUPPORT

CHAIRMAN
NUCLEAR SAFETY
REVIEW BOARD

- NUCLEAR SAFETY REVIEW BOARDS

FIGURE 2-1

3.0 Vice President, Nuclear Operations

The Vice President, Nuclear Operations is responsible for the safe, efficient, and reliable operation of Nuclear Power operating sites and reviews and concurs in plant staffing and organizational matters. This position ensures that managed activities are conducted in accordance with appropriate Federal regulations and TVA policies and procedures.

Nuclear Operations provide operations and maintenance support, as well as operational policy for units under construction/restart in order to ensure operational readiness.

The Vice President, Nuclear Operations has four principal reports and administers responsibilities through them. These principal reports are as follows:

Vice President, Operation Services
Vice President, Browns Ferry Nuclear Plant (BFN) Operations
Vice President, Sequoyah Nuclear Plant (SQN) Site
Manager, Performance Initiatives

See Figure 3-1 for the Nuclear Operations organization chart.

3.1 Vice President, Operation Services (OS)

The Vice President, Operation Services is responsible for providing necessary support to ensure NP operating sites are safe, efficient, and reliable. This position ensures that managed activities are conducted in accordance with appropriate Federal regulations and TVA policies and procedures.

The Vice President, OS has four principal reports and administers responsibilities through the following managers:

Manager, Technical Programs Support
Manager, Maintenance & Systems Support
Manager, Nuclear Training
Manager, Operations Support Services

See Figure 3-2 for the OS organization chart.

3.1.1 Technical Programs (TP)

The Manager, TP, reports to the Vice President, Operation Services, and assists senior management with establishing policy for and maintaining consistency in the plants within assigned functional areas. The Manager, TP provides oversight, technical support, and assistance to the line organizations and assists the plants with solving problems in radiological control, radioactive waste management, environmental protection, chemistry, emergency preparedness, fire protection, and nuclear security.

3.1.2 Maintenance & Systems Support (M&SS)

The Manager, M&SS, is responsible for providing consistent operating guidelines and standards for the Nuclear Operations organization, including:

A. Development of consistently applied nuclear standards, procedures, and guidelines for outages and maintenance;

B. Specialized assistance to the plants in equipment and system maintenance, maintenance systems, techniques, and improvement programs, welding, and field engineering support;

C. Long range operational planning including major work and outage planning and coordination; and

D. Oversight and coordination of maintenance manpower and training needs and schedules.

3.1.3 Nuclear Training (NT)

The Manager, NT reports to the Vice President, OS and is responsible for establishing, maintaining, and implementing the Nuclear Power Training and Qualification Program, which includes technical training for plant operations, maintenance, and technical personnel. In addition, NT provides General Employee Training and Fitness for Duty Training. The Site Training Managers receive technical and programmatic direction and support from the Manager, NT, and receive day-to-day management oversight and direction on site training needs from the assigned site manager. The Manager, NT is also responsible for managing and coordinating with the line organizations in order to attain and maintain National Academy for Nuclear Training accreditation in the applicable functional plant staff areas.

3.1.4 Operations Support

The Manager, Operations Support, is responsible for the development, implementation, and oversight of programs and processes to ensure consistent plant operations, work control standards, and outage activities. The Manager, Operations Support, is also responsible for developing and implementing a program to establish a well qualified pool of Operations personnel to fill key positions at the sites.

3.2 Manager, Performance Initiatives

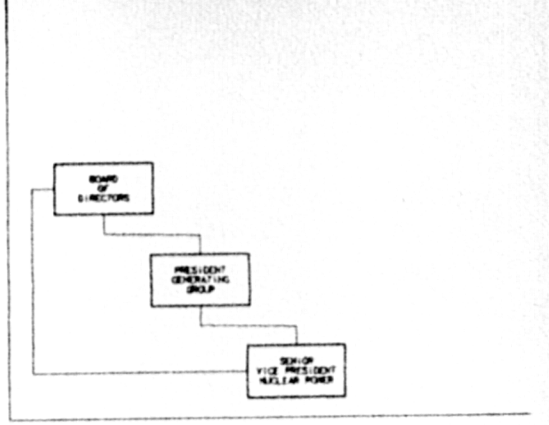
The Manager, Performance Initiatives, reports to the Vice President, Nuclear Operations, and is responsible for providing staff support to the Vice President, Nuclear Operations, and the Vice President, Operations Services. The Manager, Performance Initiatives manages the goal setting and performance reporting program, the development of operations procedures and standards, and the industrial engineering program. The Manager, Performance Initiatives, also serves as the Nuclear Operations Quality Officer responsible for establishing and ensuring implementation of the total quality process.

The Manager, Performance Initiatives, has three principal reports and administers responsibilities through the following managers:

Manager, Industrial Engineering
Manager, Improvement Initiatives
Manager, Performance Assessment

See Figure 3-3 for the Manager, Performance Initiatives organization chart.

NUCLEAR POWER
NUCLEAR OPERATIONS



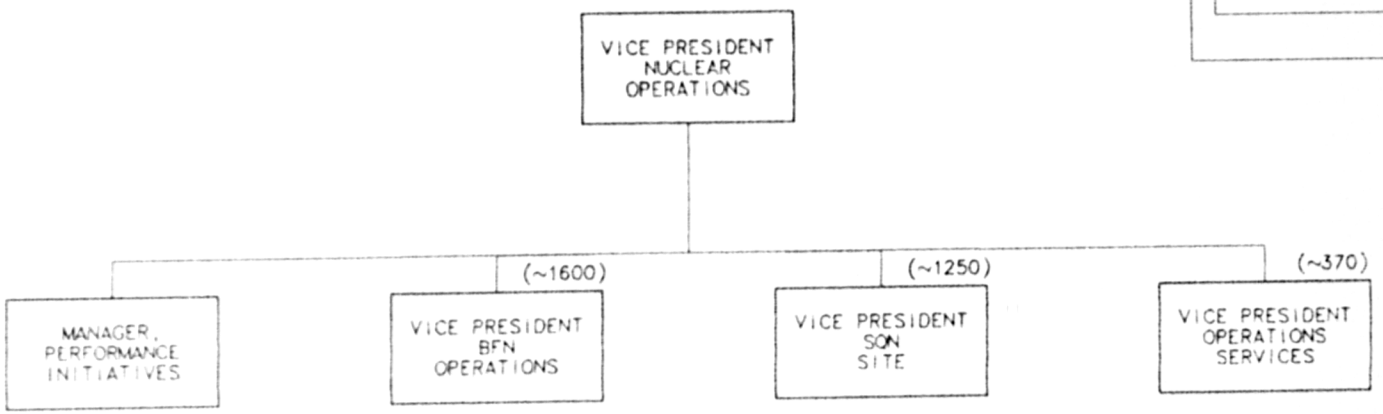
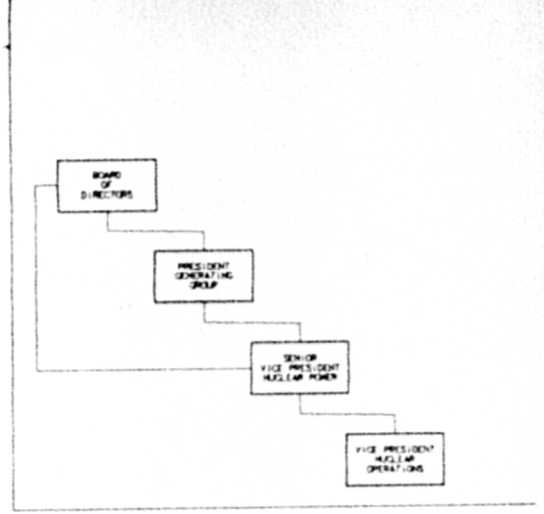


FIGURE 3-1

NUCLEAR POWER
NUCLEAR OPERATIONS
OPERATIONS SERVICES



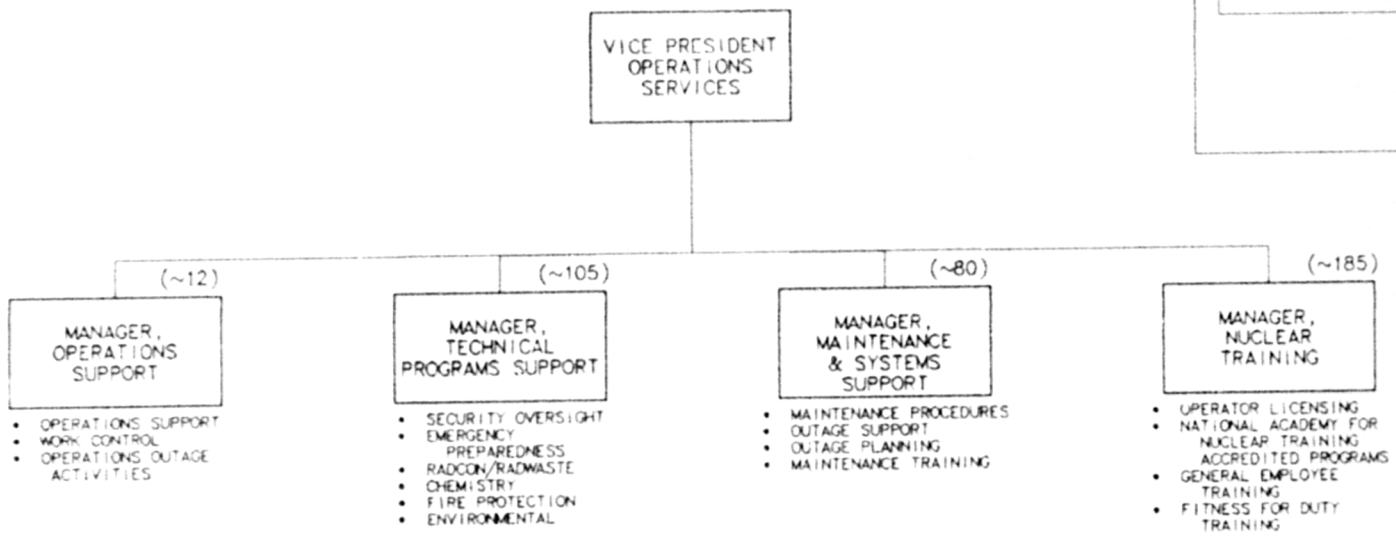
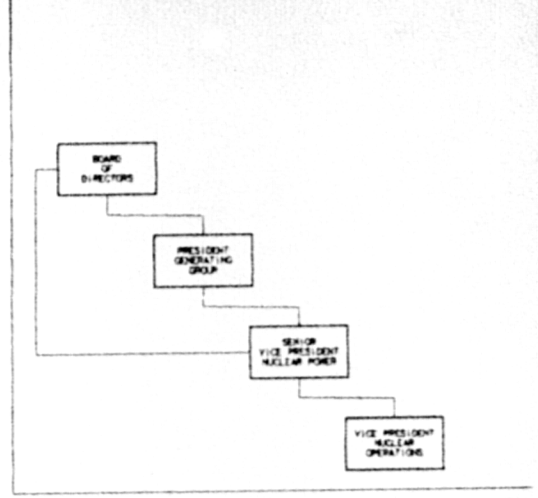


FIGURE 3-2

TAG-FIG32

NUCLEAR POWER
NUCLEAR OPERATIONS
PERFORMANCE INITIATIVES



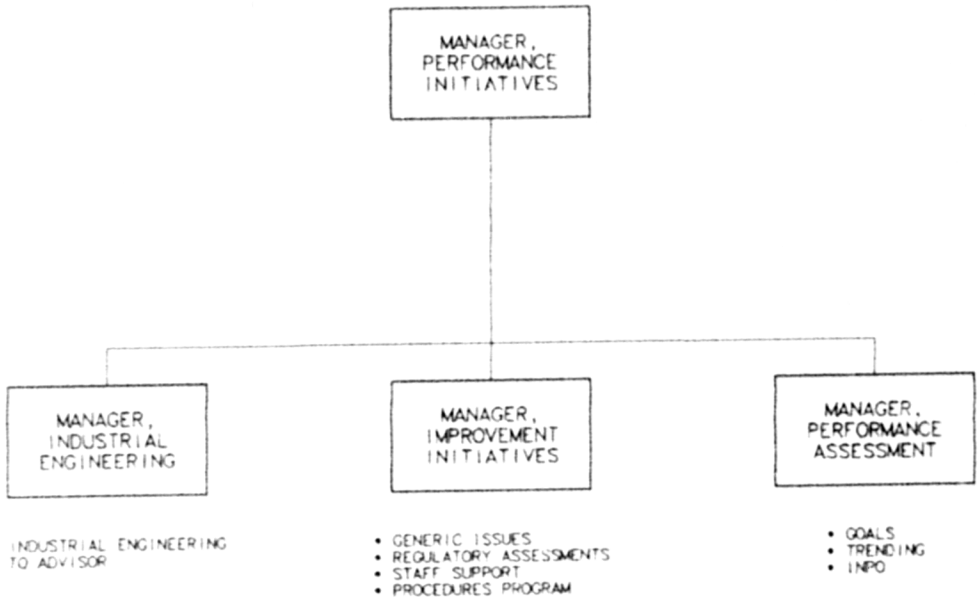


FIGURE 3-3

TAG-FIG33

3.3 Vice President, BFN Operations (BFN)*

The Vice President, BFN Operations is responsible and accountable for Unit 2 and basic site-wide activities including operations, modifications, support, licensing, quality assurance, and engineering services. The Vice President, BFN Operations, determines the nature and extent of onsite and offsite support services required to support assigned site operations in accordance with Nuclear Power policy and procedures. The Vice President, BFN Operations, is responsible for the quality of work activities and provides plant operations and maintenance support for Units 1 and 3.

The Vice President, BFN Operations, has six principal reports and administers responsibilities through the following managers:

Site Support Manager
Site Controller
Engineering and Modifications Manager
Site Licensing Manager
Plant Manager
Site Employee Relations & Development Manager

The Site Quality Manager reports only functionally to the Vice President, BFN Operations.

See Figure 3-4 for the BFN Operations organization chart.

3.3.1 Site Support

The Site Support Manager provides general management and oversight of a variety of staff and support functions, including:

a. Administrative services, procedure coordination, and document control;

b. Site industrial safety support;

c. Onsite radiological emergency preparedness program;

d. Site facilities management;

e. Site security; and

f. Onsite management interface and coordination of site ADP.

* TVA NP will have consistent plant organizations for operating units. The remainder of the site organization will be structured to support recovery and restart of remaining units.

3.3.2 Site Controller

The Site Controller is responsible for providing financial and budget support to the site. The Site Controller coordinates and monitors the preparation of all budgets, capital or recovery project proposals, multiyear plans and special financial analyses; ensures compliance with TVA, NP and site financial management and accounting procedures and instructions; establishes systems for measuring, controlling, and reporting site financial performance; and provides cost analysis and estimating support.

3.3.3 Engineering and Modifications

The Engineering and Modifications Manager provides overall management and direction using project management concepts to supervise the assigned engineering and modifications organizations. This responsibility includes providing administrative and functional direction on scope, schedule, budget, and provide the manpower to perform assigned tasks. Corporate Engineering is responsible for engineering technical direction, establishment and maintenance of engineering standards and processes, and monitoring oversight of engineering activities of the sites.

3.3.4 Site Licensing Manager

The Site Licensing Manager is responsible for the following activities:

a. Serving as the principal on site interface with the NRC, provides information and interpretations concerning regulatory requirements; directs the preparation for and conduct of NRC audits, inspections and meetings; ensures the interpretation or resolution of NRC requests or imposed regulatory changes; and ensures compliance with NRC reporting requirements;

b. Establishing and maintaining a site licensing program for obtaining and maintaining required licenses and permits;

c. Ensuring resolution of NRC issues by developing action plans and managing implementation of those plans;

d. Providing management of the site operating experience reviews, generic issues, and the commitment tracking programs; and

e. Coordination of site corrective action programs.

The Manager, Nuclear Licensing and Regulatory Affairs, provides oversight and technical direction to the Site Licensing Manager and is responsible for establishment and maintenance of related corporate standards and programs.

3.3.5 Plant Manager

The primary responsibility and authority for ensuring safe, reliable, and efficient plant operations in conformance and compliance with all Federal, State, and local laws and regulations are vested in the Plant Manager. The Plant Manager is responsible for ensuring that hardware and software modifications or revisions made subsequent to the original design or construction of the project are authorized and carried out in accordance with procedures and instructions. This position is responsible for ensuring that established acceptance criteria are satisfied before plant systems or components are returned to normal operation. The Plant Manager is responsible for ensuring that adequate and complete records and reports are developed and maintained and that plant personnel are appropriately trained and qualified for their jobs. The plant manager provides operation and maintenance support to Units 1 and 3.

The Plant Manager has four principal reports and administers responsibilities through the following managers:

Maintenance Manager
Radiological Control Manager
Plant Operations Manager
Technical Support Manager

The Site Training Manager reports only functionally to the Plant Manager.

See Figure 3-5 for the Plant Manager's organization chart.

a. Maintenance

The Maintenance Manager is responsible for planning, directing, and managing the plant main power block maintenance program to ensure that equipment and systems are maintained in accordance with operability and reliability engineering practices and requirements. This position manages the development, implementation, and maintenance of the site measuring and test equipment tool rooms.

TVA's Power Transmission and Customer Service organization is responsible for the maintenance and testing of the relaying associated with the transmission system, switchyard maintenance, generator protection, and the auxiliary power system. This organization is also responsible for the maintenance and testing of all in-plant radios, T1 spans (digital method of voice or data transmissions), and all external plant communications systems (with the exception of the Bell system and AT&T equipment).

This organization is under the administrative supervision of the Power Transmission and Customer Service-Muscle Shoals Area Manager and under the functional supervision of the plant Electrical Maintenance Manager.

b. Radiological Control

The Radiological Control Manager is responsible for radiological control activities at the plant. This includes developing, implementing, and managing the site radiological program with emphasis on meeting as low as reasonably achievable (ALARA) radiation exposure goals. This manager develops and applies radiation standards and procedures; reviews and recommends radiation protection requirements and management controls; and assists in the plant training program, providing specialized training in radiation protection. The Radiological Control Manager is responsible for conducting a comprehensive onsite radiological monitoring before, during, and after plant startup and providing radiological control coverage for all operations including maintenance, fuel handling, decontamination, and radiological waste disposal. The manager is responsible for personnel and plant radiation monitoring and maintains continuing records of personnel exposures, plant radiation, and contamination levels.

c. Plant Operations Manager

The Operations Manager has responsibility for planning, organizing, setting policy, and motivation relating to the Operations, Chemistry, and Work Control Group personnel. These activities include operational strategies for generation, chemistry control, water and waste usage, approved authority for system enhancements, and prioritization of maintenance activities. To meet these objectives, functions related to Operations, Work Control, and Chemistry are grouped under one manager responsible for facility generation (i.e., Operations Manager).

The Plant Operations Manager has four principal reports:

Operations Superintendent
Work Control Manager
Chemistry and Environmental Superintendent
Outage Scheduling Supervisor

Operations

The Operations Superintendent is responsible for all plant operations. The superintendent, through the shift operations supervisors, manages the day-to-day operation of the facility, refueling operations, start-up, operational testing, water and waste processing, and plant operations. The superintendent is responsible for coordinating and scheduling the training program for all Operations personnel as well as providing the nucleus for emergency response teams.

Within Operations are six shift crews. The minimum shift crew for one unit will consist of the Shift Operations Supervisor (SRO), Assistant Shift Operations Supervisor (SRO), four Unit Operators (RO), and four Assistant Unit Operators (AUOs). One additional SRO is required for two and three unit operation. Additional operators are assigned as required by the Technical Specifications to meet the requirements of 10 CFR 50.54m(2). Plant management and technical support personnel will be present or on call at all times.

See Figure 3-6 for the Operations Superintendent organization chart.

Shift Crew Composition:

The Shift Operations Supervisor on duty is in direct charge of and has direct responsibility for the plant, including the startup, operation, and shutdown of the reactor and turbine generators. The Assistant Shift Operations Supervisor is under the immediate supervision of the Shift Operations Supervisor. This position is responsible for the operation of one unit or for specific plant areas.

The Unit Operator is under the immediate supervision of the Assistant Shift Operations Supervisor responsible for that unit and the general supervision of the Shift Operations Supervisor. This position performs those functions which require the attention of a licensed individual. This position is responsible for the safe and efficient operation of one unit from the control room or from local control stations.

The Assistant Unit Operator is under the immediate supervision of the Unit Operator and the general supervision of the Assistant Shift Operations Supervisor. This position performs assigned routine inspections and manipulative operations. This position assists in the operation and performs work requirements within the defined area of the plant.

The Shift Technical Advisor reports to the Shift Operations Supervisor in the control room during normal and off-normal operating plant conditions. The Shift Technical Advisor serves in an advisory capacity to the Shift Operations Supervisor.

The relief of any shift position is made such that the minimum required shift crew compliment is always maintained. Such reliefs are formal and appropriate responsibilities are transferred at the time of relief.

A duty radiochemical analyst is under the functional supervisor of the Shift Operations Supervisor. The analyst's duties consist of periodic sampling of reactor coolant, feedwater, main steam, condensate, and other plant process streams as required.

Duty health physics technicians are under the functional supervision of the Shift Operations Supervisor. They perform routine radiation surveys, personnel monitoring activities, and other assigned duties. These personnel keep the Shift Operations Supervisor informed of radiation hazards and perform special surveys as requested.

Work Control

The Work Control Manager has the overall responsibility for ensuring that ongoing work activities during operating conditions and outages are executed in a timely and efficient manner. The manager develops overall work schedules and reviews all work requests.

Outage Schedule

The Outage Scheduling Supervisor has overall responsibility for outage planning, coordination, and monitoring. The supervisor plans all outages, establishes work priorities, and coordinates shift turnover.

Chemistry and Environmental

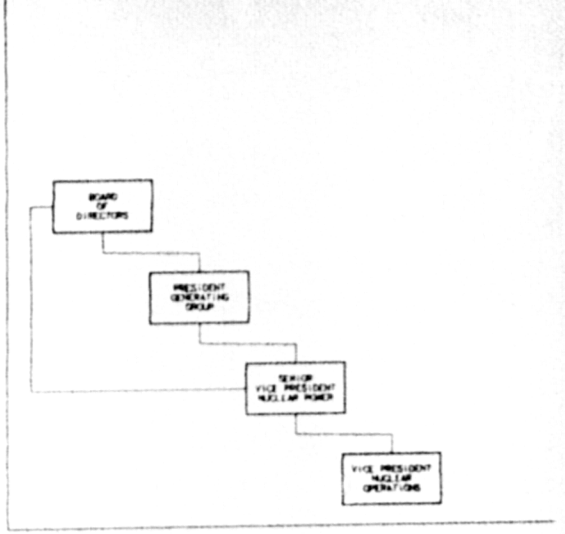
The Chemistry and Environmental Superintendent is responsible for implementation of effective site programs for plant chemistry, radiochemistry and environmental compliance.

d. Technical Support

The Technical Support Manager is responsible for technical direction and staff assistance in the area of systems engineering. Systems engineering includes nuclear, reactor, mechanical, chemical, electrical, and instrumentation and controls. Responsibilities include plant and equipment performance monitoring and tests, reactor engineering, integrated system operation and post modification and major maintenance testing.

Technical Support carries out a comprehensive program of plant tests, studies, and investigations for the purpose of monitoring the reactor, engineered safeguards, NSSS equipment, and balance-of-plant equipment directed at ensuring compliance with operating licenses, technical specifications, and improving plant and system efficiency.

NUCLEAR POWER
NUCLEAR OPERATIONS
BROWNS FERRY OPERATIONS
(THREE UNIT PLANT)



VICE PRESIDENT NUCLEAR ASSURANCE LICENSING & FUELS

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

VICE PRESIDENT BROWNS FERRY OPERATIONS

SITE QUALITY ASSURANCE

- QA AUDITS
- QC INSPECTIONS
- QUALITY IMPROVEMENT
- MONITORING
- QUALITY ENGINEERING REVIEWS
- MONITORING OF DESIGN PROCESS

SITE LICENSING MANAGER (~20)

- NRC LICENSES
- NRC COMPLIANCE
- NRC DOCUMENTATION
- COMMITMENT TRACKING
- NUCLEAR EXPERIENCE REVIEW
- CORRECTIVE ACTION

SITE EMPLOYEE RELATIONS & DEVELOPMENT MANAGER

- SITE HUMAN RESOURCES SUPPORT
- STAFFING
- LABOR RELATIONS
- EMPLOYEE COMMUNICATIONS
- COMPENSATION ADMINISTRATION
- AFFIRMATIVE ACTION & EEO

SITE SUPPORT MANAGER (~190)

- ADMINISTRATIVE SERVICES
- INDUSTRIAL SAFETY
- EMERGENCY PREPAREDNESS
- FACILITIES
- SITE PROCEDURES
- CAQ PROGRAMS
- SITE ADP
- SITE DOCUMENT CONTROL
- SECURITY

SITE CONTROLLER (~40)

- BUDGETS, MULTI-YEAR PLANS
- SITE PERFORMANCE REPORTING
- FINANCIAL REPORTS
- ACCOUNTING & PAYROLL OPERATIONS

PLANT MANAGER (~1085)

- MAINTENANCE
- OPERATIONS
- SCHEDULE/ WORK CONTROL
- CHEMISTRY & ENVIRONMENTAL
- RADIOLOGICAL CONTROL
- TECHNICAL SUPPORT
- TRAINING

ENGINEERING & MODIFICATIONS MANAGER (~480)

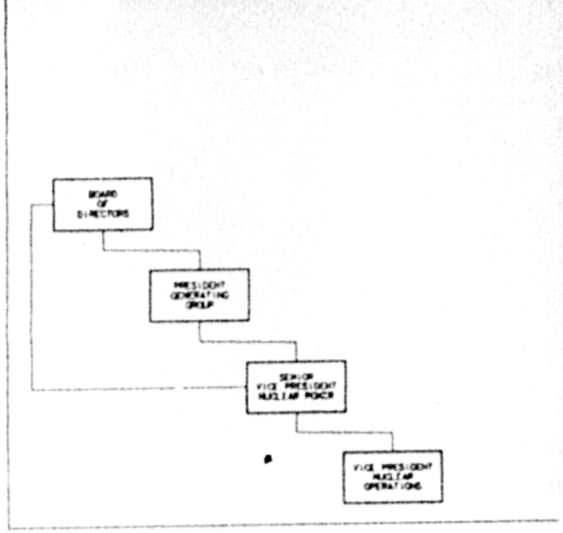
- OPERATING PLANT ENGINEERING SUPPORT
- ENGINEERING/DESIGN
- ENGINEERING CONTRACT MANAGEMENT
- PROJECT ENGINEERING CONTROLS
- PLANT MODIFICATIONS
- SITE CONSTRUCTION
- FIELD ENGINEERING
- CRAFT SUPPORT
- MATERIALS & PROCUREMENT
- INTEGRATED SCHEDULING

- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

FIGURE 3-4

TAG-FIG34

NUCLEAR POWER
NUCLEAR OPERATIONS
BROWNS FERRY OPERATIONS
(THREE UNIT PLANT)
PLANT MANAGER



VICE PRESIDENT BFN OPERATIONS

PLANT MANAGER

NUCLEAR TRAINING MANAGER

SITE TRAINING MANAGER

(~475)

MAINTENANCE MANAGER

- PLANT POWER BLOCK MAINTENANCE PROGRAM

(~175)

RADIOLOGICAL CONTROL MANAGER

- RAD CONTROL MANAGEMENT
- ALARA
- RADIATION PROCEDURES, PROTECTION, TRAINING & MONITORING
- PERSONNEL EXPOSURE RECORDS
- RADIATION & CONTAMINATION LEVEL RECORDS
- RADIOLOGICAL WASTE & DECONTAMINATION MANAGEMENT

(~340)

PLANT OPERATIONS MANAGER

(~95)

TECHNICAL SUPPORT MANAGER

- SYSTEMS ENGINEERING
- INSTRUMENTATION AND CONTROL
- POST MODIFICATION TESTING
- REACTOR ENGINEERING
- NSSS SYSTEMS
- PERFORMANCE MONITORING

CHEMISTRY & ENVIRONMENTAL SUPERINTENDENT

- CHEMISTRY
- RADIOCHEMISTRY
- ENVIRONMENTAL COMPLIANCE

OPERATIONS SUPERINTENDENT

- PLANT OPERATIONS
- REFUELING OPERATIONS MANAGEMENT
- OPERATIONAL TESTING
- WATER & WASTE PROCESSING
- OPERATIONS TRAINING

WORK CONTROL MANAGER

- WORK REQUEST REVIEW
- OVERALL WORK SCHEDULES

OUTAGE SCHEDULING SUPERVISOR

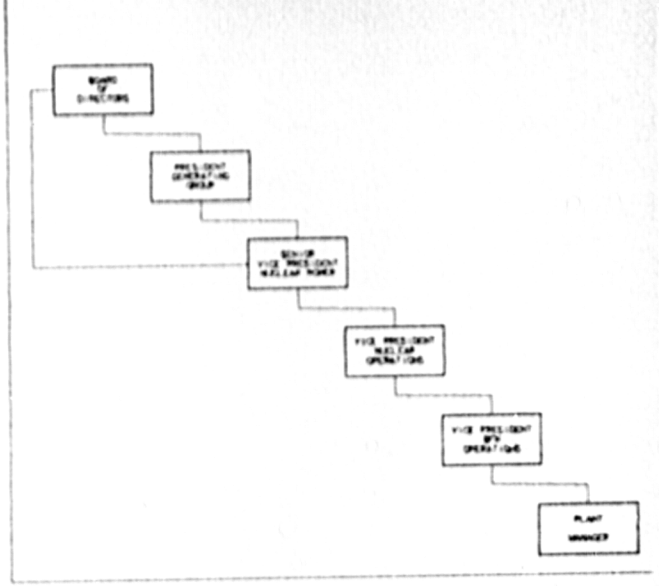
- OUTAGE PLANNING
- OUTAGE COORDINATION
- OUTAGE MONITORING & ASSESSMENT

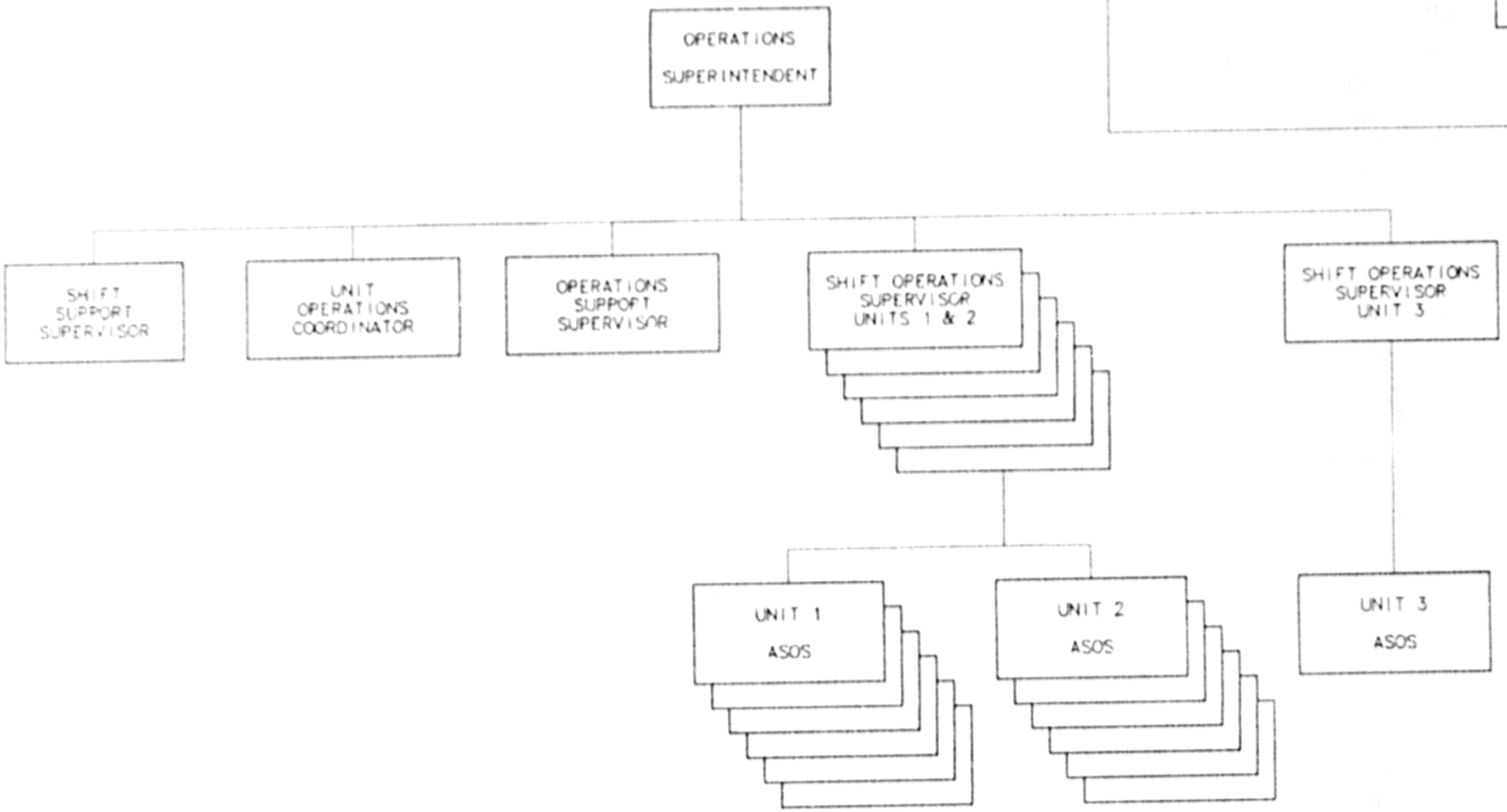
- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

FIGURE 3-5

TAG-FIG35

NUCLEAR POWER
NUCLEAR OPERATIONS
BROWNS FERRY OPERATIONS
(THREE UNIT PLANT)
PLANT MANAGER
PLANT OPERATIONS
OPERATIONS SUPERINTENDENT





TAG-FIG36

FIGURE 3-6

3.4 Vice President, SQN Site (SQN)

The Vice President, SQN is responsible and accountable for activities at the site, including operations, modifications, support, licensing, quality assurance, and engineering services. The Vice President, SQN manages activities associated with the Sequoyah plant and determines the nature and extent of onsite and offsite support services required to support site operations in accordance with NP policy and procedures. The Vice President, SQN is responsible for the quality of work activities.

The Vice President, SQN has six principal reports and administers responsibilities through the following managers:

Site Support Manager
Site Controller
Engineering and Modifications Manager
Site Licensing Manager
Plant Manager
Site Employee Relations & Development Manager

The Site Quality Manager reports only functionally to the Vice President, SQN.

See Figure 3-7 for the SQN organization chart.

3.4.1 Site Support

The Site Support Manager provides general management and oversight of a variety of staff and support functions, including:

a. Administrative services, procedure coordination, and document control;

b. Site industrial safety support;

c. Onsite radiological emergency preparedness program;

d. Site facilities management;

e. Site security; and

f. Onsite management interface and coordination of site ADP.

3.4.2 Site Controller

The Site Controller is responsible for providing financial and budget support to the site. The Site Controller coordinates and monitors the preparation of all budgets, capital or recovery project proposals, multiyear plans and special financial analyses; ensures compliance with TVA, NP and site financial management and accounting procedures and instructions; establishes systems for measuring, controlling, and reporting site financial performance; and provides cost analysis and estimating support.

3.4.3 Engineering and Modifications

The Engineering and Modifications Manager provides overall management and direction using project management concepts to supervise the assigned engineering and modifications organizations. This responsibility includes providing administrative and functional direction on scope, schedule, budget, and provide the manpower to perform assigned tasks. Corporate Engineering is responsible for engineering technical direction, establishment and maintenance of engineering standards and processes, and monitoring oversight of engineering activities of the sites.

3.4.4 Site Licensing Manager

The Site Licensing Manager is responsible for the following activities:

a. Serving as the principal on site interface with the NRC, provides information and interpretations concerning regulatory requirements; directs the preparation for and conduct of NRC audits, inspections and meetings; ensures the interpretation or resolution of NRC requests or imposed regulatory changes; and ensures compliance with NRC reporting requirements;

b. Establishing and maintaining a site licensing program for obtaining and maintaining required licenses and permits;

c. Ensuring resolution of NRC issues by developing action plans and managing implementation of those plans;

d. Providing management of the site operating experience reviews, generic issues, and the commitment tracking programs; and

e. Coordination of site corrective action programs.

The Manager, Nuclear Licensing and Regulatory Affairs, provides oversight and technical direction to the Site Licensing Manager and is responsible for establishment and maintenance of related corporate standards and programs.

3.4.5 Plant Manager

The primary responsibility and authority for ensuring safe, reliable, and efficient plant operations in conformance and compliance with all Federal, State, and local laws and regulations are vested in the Plant Manager. The Plant Manager is responsible for ensuring that hardware and software modifications or revisions made subsequent to the original design or construction of the project are authorized and carried out in accordance with procedures and instructions. This position is responsible for ensuring that established acceptance criteria are satisfied before plant systems or components are returned to normal operation. The Plant Manager is responsible for ensuring that adequate and complete records and reports are developed and maintained and that plant personnel are appropriately trained and qualified for their jobs.

The Plant Manager has four principal reports and administers responsibilities through the following managers:

Maintenance Manager
Radiological Control Manager
Plant Operations Manager
Technical Support Manager

The Site Training Manager reports only functionally to the Plant Manager.

See Figure 3-8 for the Plant Manager's organization chart

a. Maintenance

The Maintenance Manager is responsible for planning, directing, and managing the plant main power block maintenance program to ensure that equipment and systems are maintained in accordance with operability and reliability engineering practices and requirements. This position manages the development, implementation, and maintenance of the site measuring and test equipment tool rooms.

TVA's Power Transmission and Customer Service organization is responsible for the maintenance and testing of the relaying associated with the transmission system, switchyard maintenance, generator protection, and the auxiliary power system. This organization is also responsible for the maintenance and testing of all in-plant radios, T1 spans (digital method of voice or data transmissions), and all external plant communications systems (with the exception of the Bell system and AT&T equipment).

This organization is under the administrative supervision of the Power Transmission and Customer Service-Muscle Shoals Area Manager and under the functional supervision of the plant Electrical Maintenance Manager.

b. Radiological Control

The Radiological Control Manager is responsible for radiological control activities at the plant. This includes developing, implementing, and managing the site radiological program with emphasis on meeting as low as reasonably achievable (ALARA) radiation exposure goals. This Manager develops and applies radiation standards and procedures; reviews and recommends radiation protection requirements and management controls; and assists in the plant training program, providing specialized training in radiation protection. The Radiological Control Manager is responsible for conducting a comprehensive onsite radiological monitoring before, during, and after plant startup and providing radiological control coverage for all operations including maintenance, fuel handling, decontamination, and radiological waste disposal. The manager is responsible for personnel and plant radiation monitoring and maintains continuing records of personnel exposures, plant radiation, and contamination levels.

c. Plant Operations Manager

The Operations Manager has responsibility for planning, organizing, setting policy, and motivation relating to the Operations, Chemistry, and Work Control Group personnel. These activities include operational strategies for generation, chemistry control, water and waste usage, approved authority for system enhancements, and prioritization of maintenance activities. To meet these objectives, functions related to Operations, Work Control, and Chemistry are grouped under one manager responsible for facility generation (i.e., Operations Manager).

The Plant Operations Manager has four principal reports:

Operations Superintendent
Work Control Manager
Chemistry and Environmental Superintendent
Outage Scheduling Supervisor

Operations

The Operations Superintendent is responsible for all plant operations. The superintendent, through the shift operations supervisors, manages the day-to-day operation of the facility, refueling operations, start-up, operational testing, water and waste processing, and plant operations. The superintendent is responsible for coordinating and scheduling the training program for all Operations personnel as well as providing the nucleus for emergency response teams.

Within Operations are six shift crews. The minimum shift crew for one unit will consist of the Shift Operations Supervisor (SRO), two Unit Operators (RO), and two Assistant Unit Operators (AUOs). One assistant SRO, one additional RO, and one AUO, will be required for 2-unit operation. Additional operators are assigned as required by the Technical Specifications to meet the requirements of 10 CFR 50.54(m). Plant management and technical support personnel will be present or on call at all times.

See Figure 3-9 for the Operations Superintendent organization chart.

Shift Crew Composition:

The Shift Operations Supervisor on duty is in direct charge of and has direct responsibility for the plant, including the startup, operation, and shutdown of the reactor and turbine generators. The Assistant Shift Operations Supervisor is under the immediate supervision of the Shift Operations Supervisor. This position is responsible for the operation of one unit or for specific plant areas.

The Unit Operator is under the immediate supervision of the Assistant Shift Operations Supervisor responsible for that unit and the general supervision of the Shift Operations Supervisor. This position performs those functions which require the attention of a licensed individual. This position is responsible for the safe and efficient operation of one unit from the control room or from local control stations.

The Assistant Unit Operator is under the immediate supervision of the Unit Operator and the general supervision of the Assistant Shift Operations Supervisor. This position performs assigned routine inspections and manipulative operations. This position assists in the operation and performs work requirements within the defined area of the plant.

The Shift Technical Advisor reports to the Shift Operations Supervisor in the control room during normal and off-normal operating plant conditions. The Shift Technical Advisor serves in an advisory capacity to the Shift Operations Supervisor.

The relief of any shift position is made such that the minimum required shift crew compliment is always maintained. Such reliefs are formal and appropriate responsibilities are transferred at the time of relief.

A duty radiochemical analyst is under the functional supervision of the Shift Operations Supervisor. The analyst's duties consist of periodic sampling of reactor coolant, feedwater, main steam, condensate, and other plant process streams as required.

Duty health physics technicians are under the functional supervision of the Shift Operations Supervisor. They perform routine radiation surveys, personnel monitoring activities, and other assigned duties. These personnel keep the Shift Operations Supervisor informed of radiation hazards and perform special surveys as requested.

Work Control

The Work Control manager has the overall responsibility for ensuring that ongoing work activities during operating conditions and outages are executed in a timely and efficient manner. The manager develops overall work schedules and reviews all work requests.

Outage Schedule

The outage scheduling supervisor has overall responsibility for outage planning, coordination, and monitoring. The supervisor plans all outages, establishes work priorities, and coordinates shift turnover.

Chemistry and Environmental

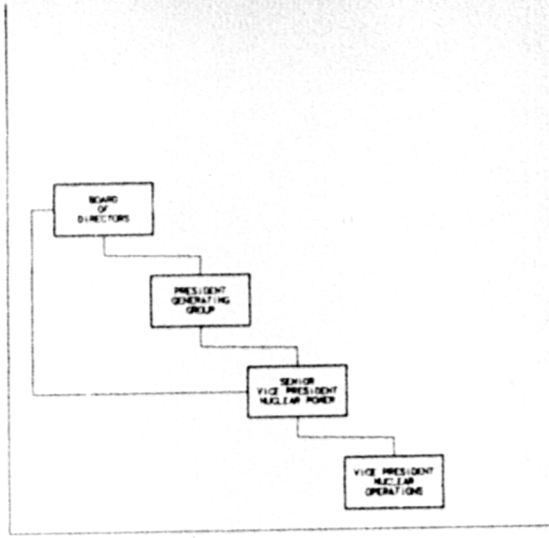
The Chemistry and Environmental Superintendent is responsible for implementation of effective site programs for plant chemistry, radiochemistry and environmental compliance.

d. Technical Support

The Technical Support Manager is responsible for technical direction and staff assistance in the area of systems engineering. Systems engineering includes nuclear, reactor, mechanical, chemical, electrical, and instrumentation and controls. Responsibilities include plant and equipment performance monitoring and tests, reactor engineering, integrated system operation and post modification and major maintenance testing.

Technical Support carries out a comprehensive program of plant tests, studies, and investigations for the purpose of monitoring the reactor, engineered safeguards, NSSS equipment, and balance-of-plant equipment directed at ensuring compliance with operating licenses, technical specifications, and improving plant and system efficiency.

NUCLEAR POWER
NUCLEAR OPERATIONS
SEQUOYAH SITE



VICE PRESIDENT NUCLEAR ASSURANCE, LICENSING & FUELS

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

VICE PRESIDENT SEQUOYAH SITE

SITE QUALITY ASSURANCE

- QA AUDITS
- QC INSPECTIONS
- QUALITY IMPROVEMENT
- MONITORING
- QUALITY ENGINEERING REVIEWS
- MONITORING OF DESIGN PROCESS

SITE LICENSING MANAGER (~20)

- NRC LICENSES
- NRC COMPLIANCE
- NRC DOCUMENTATION
- COMMITMENT TRACKING
- NUCLEAR EXPERIENCE REVIEW

SITE EMPLOYEE RELATIONS & DEVELOPMENT MANAGER

- SITE HUMAN RESOURCES SUPPORT
- STAFFING
- LABOR RELATIONS
- EMPLOYEE COMMUNICATIONS
- COMPENSATION ADMINISTRATION
- AFFIRMATIVE ACTION & EEO

SITE SUPPORT MANAGER (~350)

- ADMINISTRATIVE SERVICES
- INDUSTRIAL SAFETY
- EMERGENCY PREPAREDNESS
- FACILITIES
- MATERIALS & PROCUREMENT
- SITE PROCEDURES
- CAQ PROGRAMS
- SITE ADP SECURITY & TRAINING
- SITE DOCUMENT CONTROL

SITE CONTROLLER (~20)

- INTEGRATED SCHEDULING
- BUDGETS, MULTI-YEAR PLANS
- SITE PERFORMANCE REPORTING
- FINANCIAL REPORTS
- ACCOUNTING & PAYROLL OPERATIONS

PLANT MANAGER (~815)

- MAINTENANCE
- OPERATIONS
- SCHEDULE/ WORK CONTROL
- CHEMISTRY & ENVIRONMENTAL
- RADIOLOGICAL CONTROL
- TECHNICAL SUPPORT
- TRAINING

ENGINEERING & MODIFICATIONS MANAGER (~425)

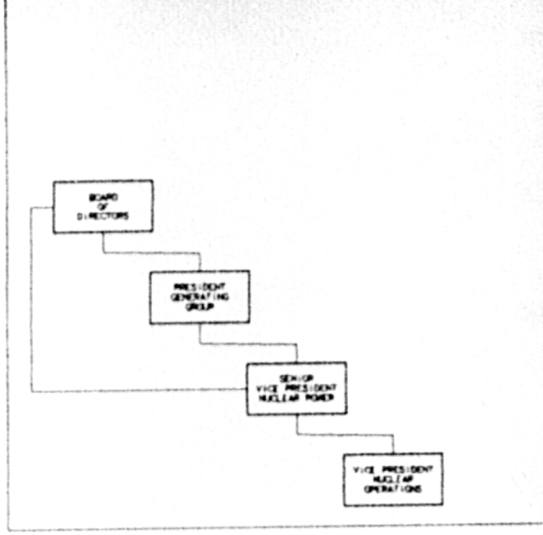
- OPERATING PLANT ENGINEERING SUPPORT
- ENGINEERING/DESIGN
- ENGINEERING CONTRACT MANAGEMENT
- PROJECT ENGINEERING CONTROLS
- PLANT MODIFICATIONS
- SITE CONSTRUCTION
- FIELD ENGINEERING
- CRAFT SUPPORT

– – – INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

FIGURE 3-7

TAG-FIG37

NUCLEAR POWER
NUCLEAR OPERATIONS
SEQUOYAH SITE
PLANT MANAGER



VICE PRESIDENT
SQN
SITE

PLANT
MANAGER

NUCLEAR
TRAINING
MANAGER

SITE
TRAINING
MANAGER

(~390)

MAINTENANCE
MANAGER

- PLANT POWER BLOCK MAINTENANCE PROGRAM

(~100)

RADIOLOGICAL
CONTROL
MANAGER

- RAD CONTROL MANAGEMENT
- ALARA
- RADIATION PROCEDURES, PROTECTION, TRAINING & MONITORING
- PERSONNEL EXPOSURE RECORDS
- RADIATION & CONTAMINATION LEVEL RECORDS
- RADIOLOGICAL WASTE & DECONTAMINATION MANAGEMENT

(~240)

PLANT
OPERATIONS
MANAGER

(~85)

TECHNICAL
SUPPORT
MANAGER

- SYSTEMS ENGINEERING
  - INSTRUMENTATION AND CONTROL
  - POST MODIFICATION TESTING
  - REACTOR ENGINEERING
  - NSSS SYSTEMS
- PERFORMANCE MONITORING

CHEMISTRY &
ENVIRONMENTAL
SUPERINTENDENT

- CHEMISTRY
- RADIOCHEMISTRY
- ENVIRONMENTAL COMPLIANCE

OPERATIONS
SUPERINTENDENT

- PLANT OPERATIONS
- REFUELING OPERATIONS MANAGEMENT
- OPERATIONAL TESTING
- WATER & WASTE PROCESSING
- OPERATIONS TRAINING

WORK CONTROL
MANAGER

- WORK REQUEST REVIEW
- OVERALL WORK SCHEDULES

OUTAGE
SCHEDULING
SUPERVISOR

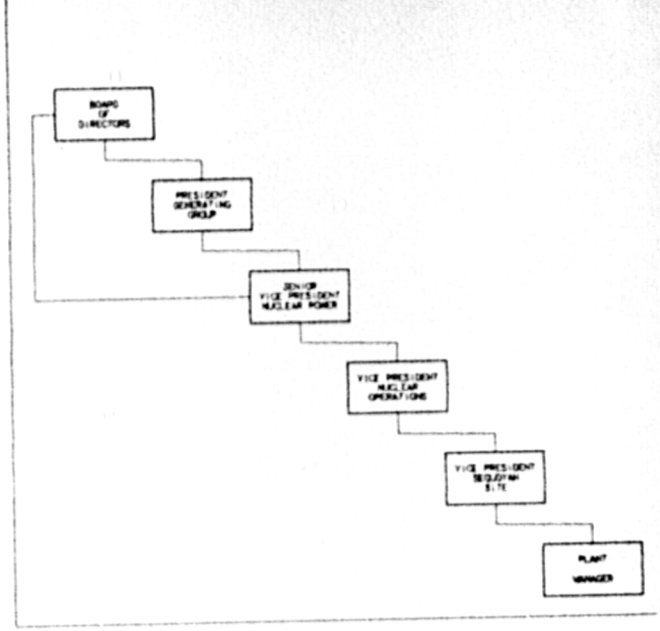
- OUTAGE PLANNING
- OUTAGE COORDINATION
- OUTAGE MONITORING & ASSESSMENT

– – – INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

FIGURE 3-8

TAG-FIG38

NUCLEAR POWER
NUCLEAR OPERATIONS
SEQUOYAH SITE
PLANT MANAGER
PLANT OPERATIONS
OPERATIONS SUPERINTENDENT



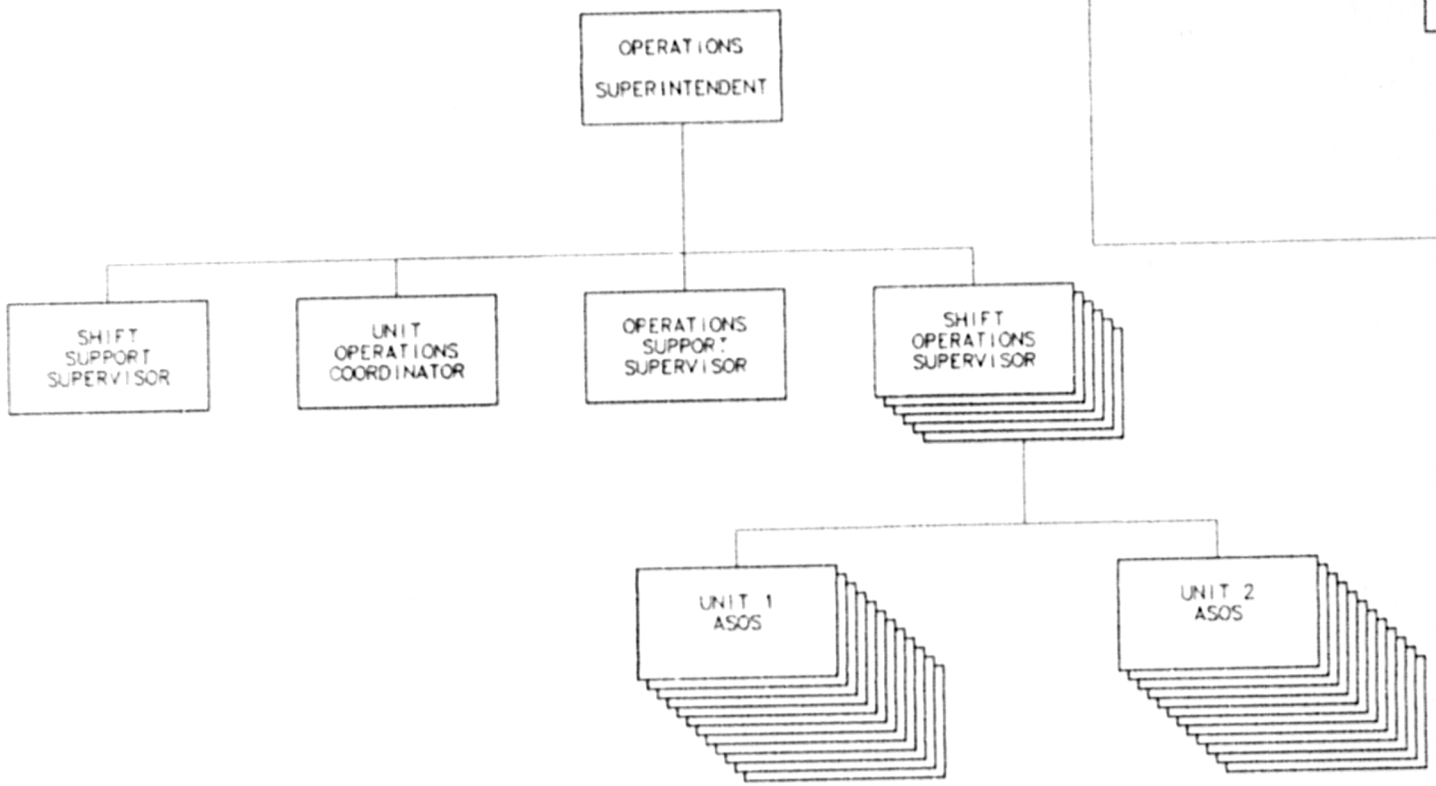


FIGURE 3-9

TAG-F1G39

4.0 Vice President, Bellefonte Construction (BLN)

The Vice President, Bellefonte Construction, is responsible for managing all site activities associated with plant lay up and maintenance to ensure safe, reliable, efficient plant activities, and processes to maintain compliance with applicable regulatory requirements and good engineering practices.

The Vice President, BLN Construction, is also responsible for the licensing, engineering, design, construction, and startup testing required to support the completion and startup of BLN Units 1 and 2.

The Vice President, BLN Construction, has seven principal reports and administers responsibilities through the following managers:

Site Support Manager
Site Controller
Site Licensing Manager
Site Engineering Manager
Project Completion Manager
Plant Manager
Site Employee Relations & Development Manager

The Site Quality Manager reports only functionally to the Vice President, BLN.

See Figure 4-1 for the BLN organization chart.

4.1 Site Support Manager

The Site Services Manager is responsible for managing and coordinating site services in support of plant layup and plant completion. These services include facility support, safety, training, materials and management, procedures, security, document control, etc.

4.2 Site Controller

The Site Controller is responsible for providing financial and budget support to the site. The Site Controller coordinates and monitors the preparation of all budgets, capital or recovery project proposals, multiyear plans and special financial analyses; ensures compliance with TVA, NP and site financial management and accounting procedures and instructions; establishes systems for measuring, controlling, and reporting site financial performance; and provides cost analysis and estimating support.

4.3 Site Engineering Manager

The Engineering Manager is responsible for assuring technical programs are in place for configuration control and that technical data bases are maintained and correct. He also assures that programs which transition from plant completion to support of operations, i.e., maintenance of fire protection, environmental qualification, etc., are in place and functioning. He additionally provides engineering for modification activities and for technical support of plant operations.

4.4 Site Licensing Manager

The Site Licensing Manager is responsible for the following activities:

a. Serving as the principal on site interface with the NRC, provides information and interpretations concerning regulatory requirements; directs the preparation for and conduct of NRC audits, inspections and meetings; ensures the interpretation or resolution of NRC requests or imposed regulatory changes; and ensures compliance with NRC reporting requirements;

b. Establishing and maintaining a site licensing program for obtaining and maintaining required licenses and permits;

c. Ensuring resolution of NRC issues by developing action plans and managing implementation of those plans;

d. Providing management of the site operating experience reviews, generic issues, and the commitment tracking programs; and

e. Coordination of site corrective action programs.

The Manager, Nuclear Licensing and Regulatory Affairs, provides oversight and technical direction to the Site Licensing Manager and is responsible for establishment and maintenance of related corporate standards and programs.

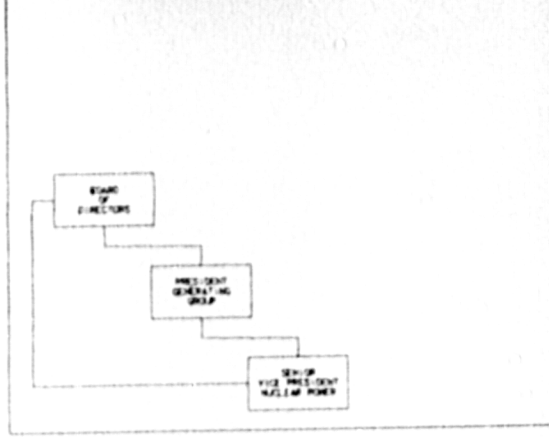
4.5 Project Completion Manager

The Project Completion Manager is responsible for all site activities dealing with completion of the plant up through obtaining the operating license. These activities include project planning, engineering, construction, startup testing, and turnover to plant operations. This position will manage all completion contracts, including engineering and construction.

4.6 Plant Manager

The Plant Manager is responsible for providing maintenance operations, radiological control, and technical support services associated with plant completion and startup activities.

NUCLEAR POWER
BELLEFONTE CONSTRUCTION



GENERAL MANAGER NUCLEAR ASSURANCE

VICE PRESIDENT NUCLEAR ASSURANCE, LICENSING & FUELS

VICE PRESIDENT BELLEFONTE CONSTRUCTION

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

SITE EMPLOYEE RELATIONS & DEVELOPMENT MANAGER

SITE QUALITY MANAGER	SITE SUPPORT MANAGER (~80)	SITE LICENSING MANAGER (~8)	PROJECT COMPLETION MANAGER (~15)	SITE ENGINEERING MANAGER (~25)	PLANT MANAGER (~150)	SITE CONTROLLER (~4)
• QA AUDITS • QC INSPECTIONS • MONITORING • QUALITY ENGINEERING REVIEWS • MONITORING OF DESIGN PROCESS	• FACILITIES • SECURITY • INDUSTRIAL SAFETY • TRAINING • MATERIALS MANAGEMENT • PROCEDURES • HEALTH • DOCUMENT CONTROL	• COMPLIANCE LICENSING • REGULATORY LICENSING • NER/CAP/INPO	• PLANNING • CONSTRUCTION • STARTUP TESTING • ENGINEERING	• ENGINEERING SUPPORT • TECHNICAL ADMINISTRATION • TECHNICAL PROGRAMS	• MAINTENANCE • OPERATIONS • TECHNICAL SUPPORT • RADIOLOGICAL CONTROL • PLANT LAYUP	• BUDGET • ACCOUNTING • BUSINESS REPORTING

- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

FIGURE 4-1

TAG-FIG41

5.0 Vice President, Nuclear Projects

The Vice President, Nuclear Projects, is responsible for Browns Ferry Units 1 and 3 recovery, Watts Bar Units 1 and 2 startup, overall corporate project management, corporate modifications, and corporate engineering. The key functions of the Vice President, Nuclear Projects, are to integrate and manage the development of assigned units through engineering, construction, and licensing in order to turn them over to the Nuclear Operations organization. The Vice President, Nuclear Projects, has five principal reports and administers responsibilities through the following:

Vice President, BFN Restart
Vice President, WBN Site
Manager, Corporate Projects
Manager, Modifications Support
Manager, Corporate Engineering

See Figure 5-1 for the Vice President, Nuclear Projects, organization chart.

5.1 Vice President, BFN Restart

The Vice President, BFN Restart, provides management of the recovery efforts for Browns Ferry Units 1 and 3.

The Vice President, BFN Restart, is responsible for all activities relating to the restart of the assigned units including construction, engineering, start-up testing. This includes directing the development of management systems to control nuclear power plant construction and modification, plant preservation, pre-fuel load, and pre-operational activities.

The Vice President, BFN Restart, has three direct reports and administers responsibilities through them. The direct reports are as follows:

Restart Programs Manager
Field Services Manager
Quality Initiative Process/Procedures Manager

The Vice President, BFN Restart, has functional supervision over the Licensing Restart Manager, Engineering, Restart Quality Manager, and Unit 3 Restart Operations Manager. These are matrixed positions that have direct reports to the Vice President, BFN Operations organization.

See Figure 5-3 for the Vice President, BFN Restart organization chart.

5.1.1 Restart Programs

The BFN Restart, Restart Program Manager, is responsible for integrated programs, nonintegrated programs, and project control activities in support of unit restart.

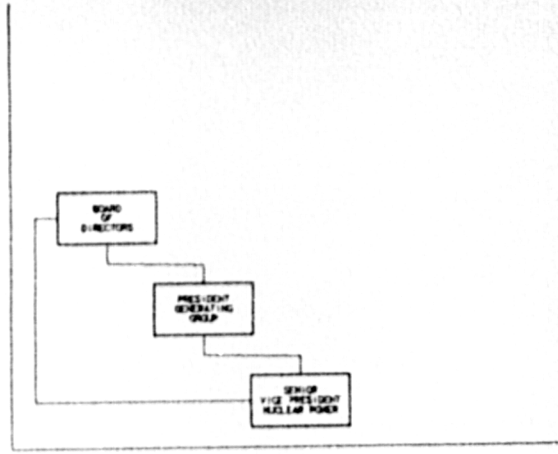
5.1.2 Field Services

The BFN Restart, Field Services Manager, is responsible for construction, modifications, materials, and procurement activities in support of unit restart.

5.1.3 Quality Initiatives Process/Procedures Manager

The Quality Initiatives Process/Procedures Manager is responsible for development and implementation of procedures, conduct surveillance of Processes, identify trends, and develop methods to measure and improve quality and productivity. Additionally, this manager directs the work authorization board for design changes.

NUCLEAR POWER
NUCLEAR PROJECTS



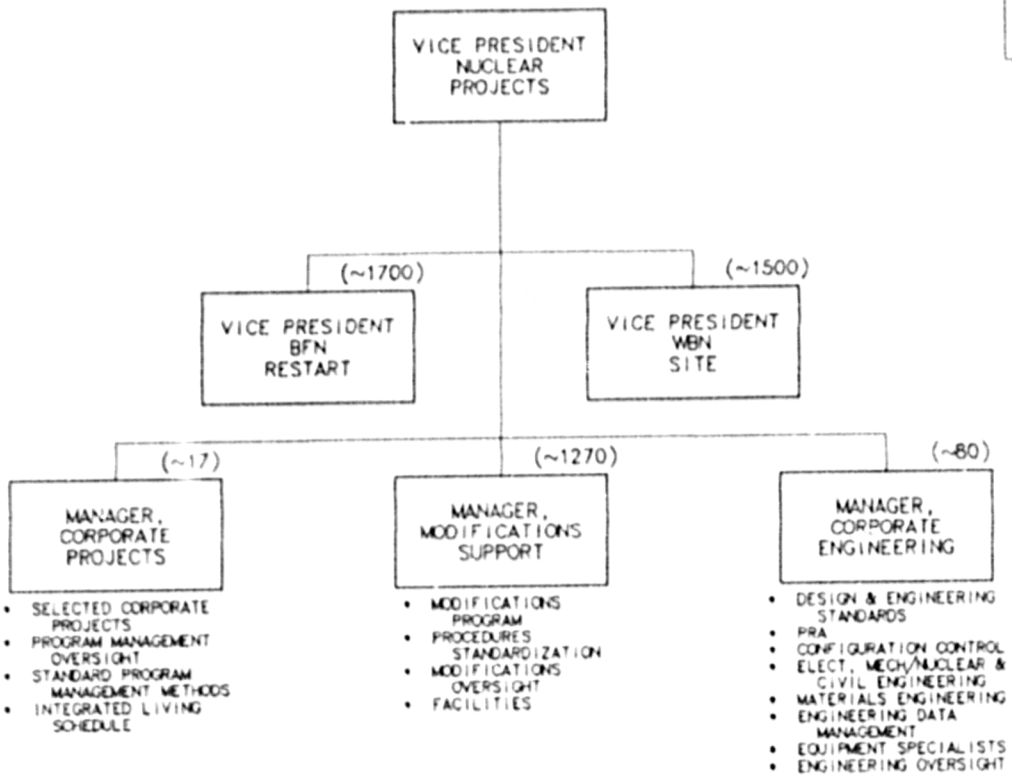
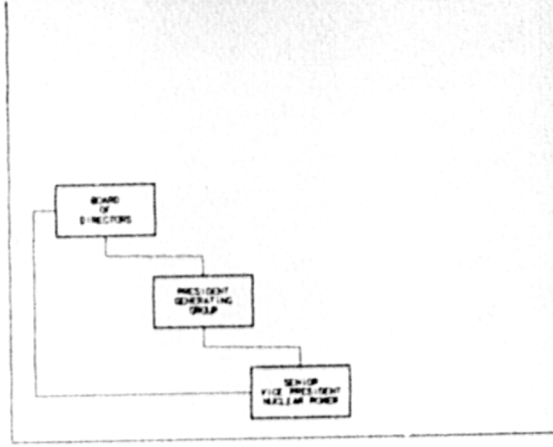
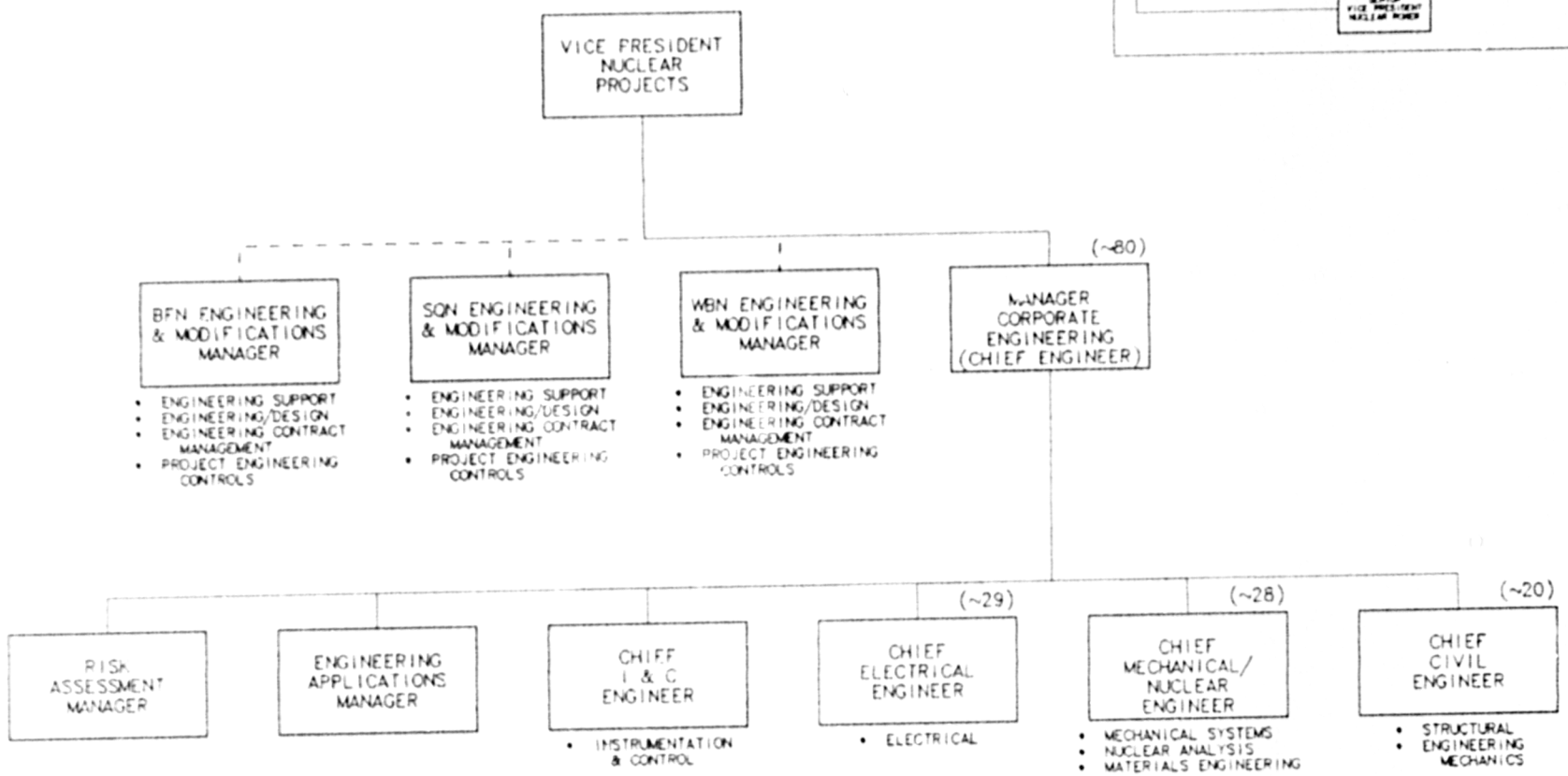


FIGURE 5-1

NUCLEAR POWER
NUCLEAR PROJECTS
CORPORATE ENGINEERING





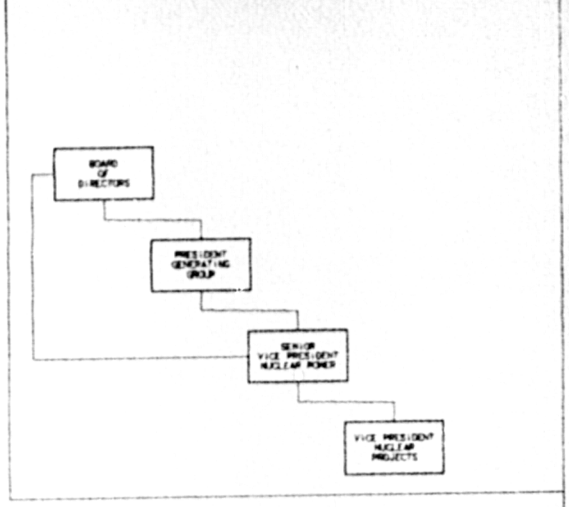
NOTE: EACH SITE ENGINEERING AND MODIFICATIONS MANAGER REPORTS TO A DESIGNATED SITE VICE PRESIDENT

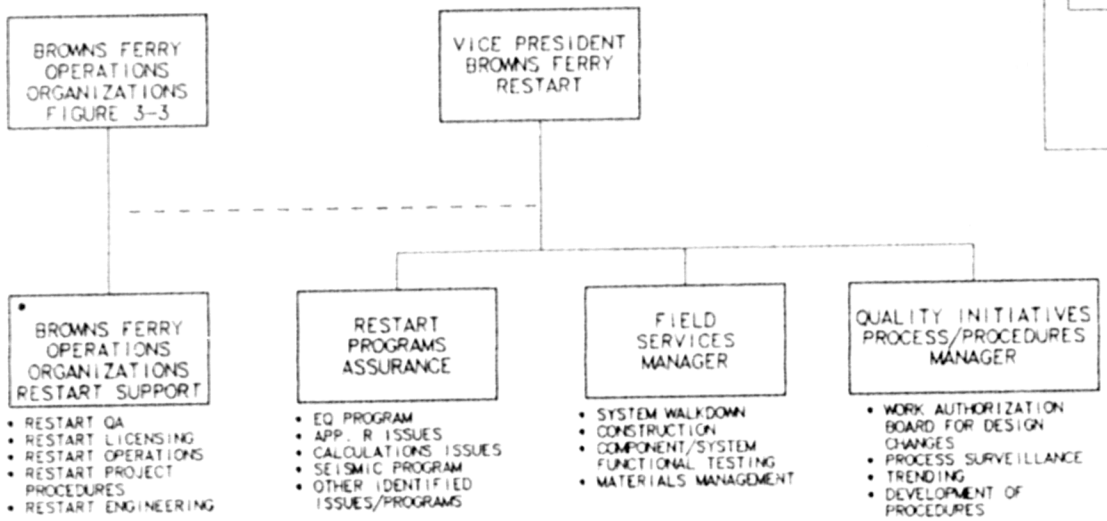
- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

FIGURE 5-2

TAG-F:G52

NUCLEAR POWER
NUCLEAR PROJECTS
BROWNS FERRY RESTART
(UNITS 1 AND 3)





• MATRIXED RESTART ORGANIZATIONS REPORT DIRECTLY TO THEIR ASSOCIATED OPERATIONS ORGANIZATIONS

- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

TAG-FIG53

FIGURE 5-3

5.2 Vice President, WBN Site

The Vice President, WBN Site, reports directly to the Vice President, Nuclear Projects. The Vice President, WBN Site, is responsible for WBN startup, construction, and general site management.

The Vice President, WBN Site, has six principal reports and administers responsibilities through them. The principal reports are as follows:

Engineering and Modifications Manager
Site Controller
Site Support Manager
Site Licensing Manager
Plant Manager
Site Employee Relations & Development Manager

The Site Quality Manager reports only functionally to the Vice President.

See Figure 5-4 for the Vice President, WBN, Site organization chart.

5.2.1 Engineering and Modifications Manager

The Engineering and Modifications Manager provides overall management and direction using project management concepts to supervise the assigned engineering and modifications organizations. This responsibility includes providing administrative and functional direction on scope, schedule, budget, and provide the manpower to perform assigned tasks. Corporate Engineering is responsible for engineering technical direction, establishment and maintenance of engineering standards and processes, and monitoring oversight of engineering activities of the sites.

5.2.2 Site Controller

The Site Controller is responsible for providing financial and budget support to the site. The Site Controller coordinates and monitors the preparation of all budgets, capital or recovery project proposals, multiyear plans and special financial analyses; ensures compliance with TVA, NP and site financial management and accounting procedures and instructions; establishes systems for measuring, controlling, and reporting site financial performance; and provides cost analysis and estimating support.

5.2.3 Site Support Manager

The Site Support Manager provides general management and oversight of a variety of staff and support functions, including:

a. Administrative services, procedure coordination, and document control;

b. Site industrial safety support;

c. Onsite radiological emergency preparedness program;

d. Site security; and

e. Onsite management interfaces and coordination of site ADP, security, and training activities.

5.2.4 Site Licensing Manager

The Site Licensing Manager is responsible for the following activities:

a. Serving as the principal on site interface with the NRC, provides information and interpretations concerning regulatory requirements; directs the preparation for and conduct of NRC audits, inspections and meetings; ensures the interpretation or resolution of NRC requests or imposed regulatory changes; and ensures compliance with NRC reporting requirements;

b. Establishing and maintaining a site licensing program for obtaining and maintaining required licenses and permits;

c. Ensuring resolution of NRC issues by developing action plans and managing implementation of those plans;

d. Providing management of the site operating experience reviews, generic issues, and the commitment tracking programs; and

e. Coordination of site corrective action programs.

The Manager, Nuclear Licensing and Regulatory Affairs, provides oversight and technical direction to the Site Licensing Manager and is responsible for establishment and maintenance of related corporate standards and programs.

5.2.5 Plant Manager

The primary responsibility and authority for ensuring safe, reliable, and efficient plant operations in conformance and compliance with all Federal, State, and local laws and regulations are vested in the Plant Manager. The Plant Manager is responsible for ensuring that hardware and software modifications or revisions made subsequent to the original design or construction of the plant are authorized and carried out in accordance with procedures and instructions. This position is responsible for ensuring that established acceptance criteria are satisfied before plant systems or components are accepted for operation. The Plant Manager is responsible for ensuring that adequate and complete records and reports are developed and maintained, staffing the plant, ensuring training of plant personnel, and establishing systems, procedures, and methods required to startup and operate the plant.

Since WBN Site is in construction status, the detailed description of the operating organization is not provided in this section. See Section 5.6 for the planned operating organization description.

See Figure 5-5 for the Plant Managers organization chart.

a. Maintenance

The Maintenance Manager is responsible for the planning and management of the site maintenance program for the main power block to ensure safe, reliable, and efficient maintenance of plant equipment.

b. Technical Support

The Technical Support Manager is responsible for technical direction and staff assistance in the area of systems engineering. Systems engineering includes nuclear, mechanical, chemical, electrical, and instrument and controls. Responsibilities include plant and equipment performance monitoring and tests, reactor engineering, integrated system operation and post-modification and major maintenance testing.

Technical Support carries out a comprehensive program of plant tests, studies, and investigations for the purpose of monitoring the reactor, engineered safeguards, NSSS equipment, and balance-of-plant equipment. This ensures compliance with the operating licenses and technical specifications and improves the efficiency of the plant.

c. Plant Operations Manager

The Plant Operations Manager is responsible for the functional areas of operations, chemistry, and fire protection.

The Operations Superintendent, who reports to the Operations Manager, directs the activities of the Operations Department. This superintendent coordinates changes in operating procedures and is responsible for supervision of day-to-day operational activities of the plant. The Operations Superintendent is also responsible for assessing the content and verifying the adequacy of classroom and simulator training.

The Shift Operations Supervisor on duty is in direct charge of and has direct responsibility for the plant. The Assistant Shift Operations Supervisor is under the immediate supervision of the Shift Operations Supervisor. This position is responsible for the operation of one unit or for specific plant areas.

The Unit Operator is under the immediate supervision of the Assistant Shift Operations Supervisor responsible for that unit and the general supervision of the Shift Operations Supervisor. This position performs those functions which require the attention of a licensed individual.

The Assistant Unit Operator is under the immediate supervision of the Unit Operator and the general supervision of the Assistant Shift Operations Supervisor. This position performs assigned routine inspections and manipulative operations.

The Shift Technical Advisor reports to the Shift Operations Supervisor in the control room during normal and off-normal operating plant conditions. The Shift Technical Advisor serves in an advisory capacity to the Shift Operations Supervisor.

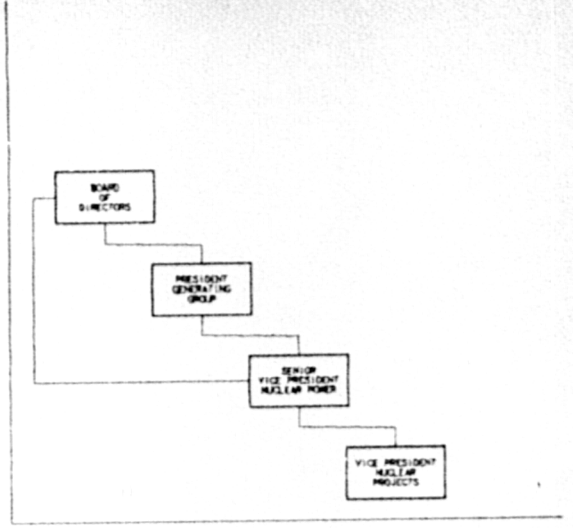
A duty radiochemical analyst is under the functional supervision of the Shift Operations Supervisor. The analyst's duties consist of periodic sampling of reactor coolant, feedwater, main steam, condensate, and other plant process streams as required.

Duty health physics technicians are under the functional supervision of the Shift Operations Supervisor. They perform routine radiation surveys, personnel monitoring activities, and other assigned duties. These personnel keep the Shift Operations Supervisor informed of radiation hazards and perform special surveys as requested.

d. Radiological Control

The Radiological Control Manager is responsible for radiological control activities at the plant. This includes developing, implementing, and managing the site radiological program with emphasis on achieving as low as reasonably achievable (ALARA) goals. This Manager develops and applies radiation standards and manager; reviews and recommends radiation protection requirements and management controls; and assists in the plant training program, providing specialized training in radiation protection. The Radiological Control Manager is responsible for conducting a comprehensive onsite radiological monitoring before, during, and after plant startup and providing radiological control coverage for all operations including maintenance, fuel handling, decontamination, and radiological waste disposal. The manager is responsible for personnel and plant radiation monitoring and maintains continuing records of personnel exposures, plant radiation, and contamination levels.

NUCLEAR POWER
NUCLEAR PROJECTS
WATTS BAR SITE



VICE PRESIDENT COMPLETION ASSURANCE

VICE PRESIDENT NUCLEAR ASSURANCE, LICENSING & FUELS

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

VICE PRESIDENT WATTS BAR SITE

QUALITY IMPROVEMENT ADVISOR

SITE QUALITY ASSURANCE

- QA AUDITS
- QC INSPECTIONS
- QUALITY IMPROVEMENT
- MONITORING
- QUALITY ENGINEERING REVIEWS
- MONITORING OF DESIGN PROCESS

(~31)

SITE LICENSING MANAGER

- NRC LICENSES
- NRC COMPLIANCE
- NRC DOCUMENTATION
- COMMITMENT TRACKING
- NUCLEAR EXPERIENCE REVIEW

(~13)

SITE EMPLOYEE RELATIONS & DEVELOPMENT MANAGER

- SITE HUMAN RESOURCES SUPPORT
- STAFFING
- LABOR RELATIONS
- EMPLOYEE COMMUNICATIONS
- COMPENSATION ADMINISTRATION
- AFFIRMATIVE ACTION & EEO

(~115)

SITE SUPPORT MANAGER

- ADMINISTRATIVE SERVICES
- INDUSTRIAL SAFETY
- EMERGENCY PREPAREDNESS
- SITE PROCEDURES
- CAQ PROGRAMS
- SITE DOCUMENT CONTROL
- SECURITY

(~29)

SITE CONTROLLER

- BUDGETS, MULTI-YEAR PLANS
- SITE PERFORMANCE REPORTING
- FINANCIAL REPORTS
- ACCOUNTING & PAYROLL OPERATIONS

(~638)

PLANT MANAGER

- MAINTENANCE
- OPERATIONS
- SCHEDULE/ WORK CONTROL
- CHEMISTRY & ENVIRONMENTAL
- RADIOLOGICAL CONTROL
- TECHNICAL SUPPORT
- TRAINING

(~475)

ENGINEERING & MODIFICATIONS MANAGER

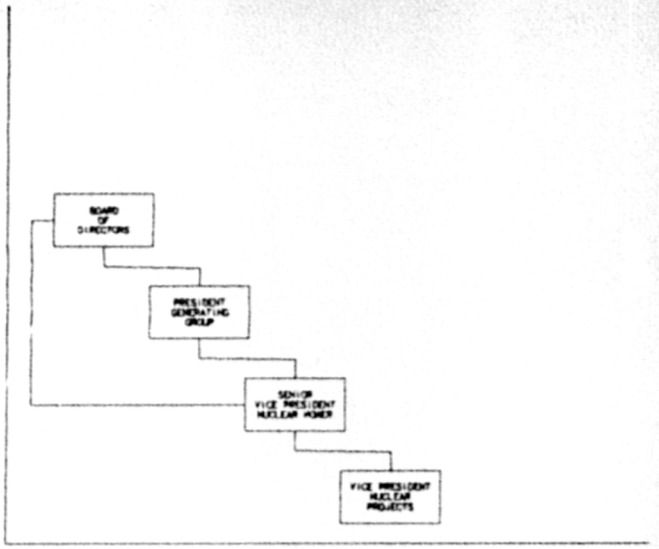
- OPERATING PLANT ENGINEERING SUPPORT
- ENGINEERING/DESIGN
- PLANT MODIFICATIONS
- SITE CONSTRUCTION
- FIELD ENGINEERING
- CRAFT SUPPORT
- FACILITIES
- MATERIALS & PROCUREMENT
- PROJECT MANAGEMENT
- STARTUP AND TEST
- PROJECT CONTROL

- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

TAG-FIG54

FIGURE 5-4

NUCLEAR POWER
NUCLEAR PROJECTS
WATTS BAR PLANT MANAGER



VICE PRESIDENT
WATTS BAR
SITE

WATTS BAR
PLANT
MANAGER

(~205)	(~272)	(~70)	(~32)
OPERATIONS MANAGER	MAINTENANCE MANAGER	TECHNICAL SUPPORT MANAGER	RADIOLOGICAL CONTROL MANAGER
• PLANT OPERATIONS • FIRE BRIGADE • WORK CONTROL INCLUDING OVERALL WORK SCHEDULES; OUTAGE PLANNING, COORDINATION, AND PERIODIC TEST PROGRAM • CHEMISTRY/ RADIOCHEMISTRY • ENVIRONMENTAL COMPLIANCE	• PREVENTIVE AND CORRECTIVE MAINTENANCE OF PLANT EQUIPMENT • SURVEILLANCE TESTING • TOOL ROOM • PLANT MAINTENANCE • COMMUNICATIONS SYSTEM MAINTENANCE • PREDICTIVE MAINTENANCE	• SYSTEMS ENGINEERING • FUEL MANAGEMENT • SNM ACCOUNTABILITY • CORE MONITORING • PLANT REPORTING	• DOSIMETRY PROGRAM • ALARA PROGRAM • RADCON SURVEILLANCE • RADIOLOGICAL WASTE PROGRAM

FIGURE 5-5

5.3 Manager, Corporate Projects

The Manager, Corporate Projects, reports to the Vice President, Nuclear Projects, and is responsible for the following activities:

A. Providing direction, oversight, and support for overall project management activities assigned by the Vice President, Nuclear Projects, and the Senior Vice President, NP;

B. Establishing appropriate site interfaces to ensure detailed project plans, defined work scopes, identified deliverables, and developed schedules and cost estimates are complete prior to site implementation;

C. Developing an overall integrated living schedule for NP and establishing the methodology for site development of site-wide integrated schedules;

D. Managing selected assigned major projects from initiation to post implementation acceptance;

E. Developing project management policy and procedures to ensure consistent methodology throughout NP. All project managers receive guidance from the Manager, Corporate Projects, in project management methodology; and

F. Coordinating and providing support to the Project Approval Board and the Site Change Control Boards.

5.4 Manager, Modifications Support

The Manager, Modifications Support, reports to the Vice President, Nuclear Projects, and is responsible for providing consistent operating guidelines and standards for the NP organization, including:

A. Development of consistently applied nuclear standards, procedures, and guidelines for modifications; and

B. Provides specialized assistance to the plants in improvement programs, welding, and field engineering support.

5.5 Manager, Corporate Engineering

The Manager, Corporate Engineering, reports to the Vice President, Nuclear Projects, and is responsible for the following primary functions:

A. Establishing and maintaining design and engineering documents, design basis document systems and standards, and is the design authority for Nuclear Engineering.

B. Oversight and monitoring of design and engineering functions at TVA nuclear plants;

C. Providing technical expertise to the TVA nuclear plant design and engineering organizations;

D. Establishing and maintaining probabilistic risk assessment (PRA) methods and expertise;

E. Establishment of design and configuration controls; and

F. Maintaining the integrity and technical adequacy of engineering and design of Nuclear Power facilities throughout their operating life.

The Manager, Corporate Engineering, is the "Chief Engineer" and is responsible for the overall management of the Civil, Electrical/Instrumentation and Controls, and Mechanical/Nuclear discipline functions.

See Figure 5-2 for the Corporate Engineering organization and matrix functions.

5.6 Vice President, WBN Site (WBN)* (Planned WBN Operating Organization)

The Vice President, WBN is responsible and accountable for activities at the site, including operations, modifications, support, licensing, quality assurance, and engineering services. The Vice President, WBN manages activities associated with the WBN plant and determines the nature and extent of onsite and offsite support services required to support site operations in accordance with NP policy and procedures. The Vice President, WBN is responsible for the quality of work activities.

The Vice President, WBN has six principal reports and administers responsibilities through the following managers:

Site Support Manager
Site Controller
Engineering and Modifications Manager
Site Licensing Manag -
Plant Manager
Site Employee Relations & Development Manager

The Site Quality Manager reports only functionally to the Vice President, WBN.

See Figure 5-6 for the WBN organization chart.

5.6.1 Site Support

The Site Programs and Support Manager provides general management and oversight of a variety of staff and support functions, including:

a. Administrative services, procedure coordination, and document control;

b. Site industrial safety support;

c. Onsite radiological emergency preparedness program;

d. Site facilities management;

e. Site security; and

f. Onsite management interface and coordination of site ADP.

* TVA NP will have consistent plant organizations for the operating unit. The remainder of the site organization will be structured to support startup of the remaining unit.

5.6.2 Site Controller

The Site Controller is responsible for providing financial and budget support to the site. The Site Controller coordinates and monitors the preparation of all budgets, capital or recovery project proposals, multiyear plans and special financial analyses; ensures compliance with TVA, NP and site financial management and accounting procedures and instructions; establishes systems for measuring, controlling, and reporting site financial performance; and provides cost analysis and estimating support.

5.6.3 Engineering and Modifications

The Engineering and Modifications Manager provides overall management and direction using project management concepts to supervise the assigned engineering and modifications organizations. This responsibility includes providing administrative and functional direction on scope, schedule, budget, and provide the manpower to perform assigned tasks. Corporate Engineering is responsible for engineering technical direction, establishment and maintenance of engineering standards and processes, and monitoring oversight of engineering activities of the sites.

5.6.4 Site Licensing Manager

The Site Licensing Manager is responsible for the following activities:

a. Serving as the principal on site interface with the NRC, provides information and interpretations concerning regulatory requirements; directs the preparation for and conduct of NRC audits, inspections and meetings; ensures the interpretation or resolution of NRC requests or imposed regulatory changes; and ensures compliance with NRC reporting requirements;

b. Establishing and maintaining a site licensing program for obtaining and maintaining required licenses and permits;

c. Ensuring resolution of NRC issues by developing action plans and managing implementation of those plans;

d. Providing management of the site operating experience reviews, generic issues, and the commitment tracking programs; and

e. Coordination of site corrective action programs.

The Manager, Nuclear Licensing and Regulatory Affairs, provides oversight and technical direction to the Site Licensing Manager and is responsible for establishment and maintenance of related corporate standards and programs.

5.6.5 Plant Manager

The primary responsibility and authority for ensuring safe, reliable, and efficient plant operations in conformance and compliance with all Federal, State, and local laws and regulations are vested in the Plant Manager. The Plant Manager is responsible for ensuring that hardware and software modifications or revisions made subsequent to the original design or construction of the project are authorized and carried out in accordance with procedures and instructions. This position is responsible for ensuring that established acceptance criteria are satisfied before plant systems or components are returned to normal operation. The Plant Manager is responsible for ensuring that adequate and complete records and reports are developed and maintained and that plant personnel are appropriately trained and qualified for their jobs.

The Plant Manager has four principal reports and administers responsibilities through the following managers:

Maintenance Manager
Radiological Control Manager
Plant Operations Manager
Technical Support Manager

See Figure 5-7 for the Plant Manager's organization chart.

a. Maintenance

The Maintenance Manager is responsible for planning, directing, and managing the plant main power block maintenance program to ensure that equipment and systems are maintained in accordance with operability and reliability engineering practices and requirements. This position manages the development, implementation, and maintenance of the site measuring and test equipment tool rooms.

TVA's Power Transmission and Customer Service organization is responsible for the maintenance and testing of the relaying associated with the transmission system, switchyard maintenance, generator protection, and the auxiliary power system. This organization is also responsible for the maintenance and testing of all in-plant radios, T1 spans (digital method of voice or data transmissions), and all external plant communications systems (with the exception of the Bell system and AT&T equipment).

This organization is under the administrative supervision of the Power Transmission and Customer Service-Muscle Shoals Area Manager and under the functional supervision of the plant Electrical Maintenance Manager.

b. Radiological Control

The Radiological Control Manager is responsible for radiological control activities at the plant. This includes developing, implementing, and managing the site radiological program with emphasis on meeting as low as reasonably achievable (ALARA) radiation exposure goals. This Manager develops and applies radiation standards and procedures; reviews and recommends radiation protection requirements and management controls; and assists in the plant training program, providing specialized training in radiation protection. The Radiological Control Manager is responsible for conducting a comprehensive onsite radiological monitoring before, during, and after plant startup and providing radiological control coverage for all operations including maintenance, fuel handling, decontamination, and radiological waste disposal. The manager is responsible for personnel and plant radiation monitoring and maintains continuing records of personnel exposures, plant radiation, and contamination levels.

c. Plant Operations Manager

The Operations Manager has responsibility for planning, organizing, setting policy, and motivation relating to the Operations, Chemistry, and Work Control Group personnel. These activities include operational strategies for generation, chemistry control, water and waste usage, approved authority for system enhancements, and prioritization of maintenance activities. To meet these objectives, functions related to Operations, Work Control, and Chemistry are grouped under one manager responsible for facility generation (i.e., Operations Manager).

The Plant Operations Manager has four principal reports:

Operations Superintendent
Work Control Manager
Chemistry and Environmental Superintendent
Outage Scheduling Supervisor

Operations

The Operations Superintendent is responsible for all plant operations. The superintendent, through the shift operations supervisors, manages the day-to-day operation of the facility, refueling operations, start-up, operational testing, water and waste processing, and plant operations. The superintendent is responsible for coordinating and scheduling the training program for all Operations personnel as well as providing the nucleus for emergency response teams.

Within Operations are six shift crews. The minimum shift crew for one unit will consist of the Shift Operations Supervisor (SRO), two Unit Operators (RO), and two Assistant Unit Operators (AUOs). One assistant SRO, one additional RO, and one AUO, will be required for 2-unit operation. Additional operators are assigned as required by the Technical Specifications to meet the requirements of 10 CFR 50.54m(2). Plant management and technical support personnel will be present or on call at all times.

See Figure 5-8 for the Operations Superintendent organization chart.

Shift Crew Composition:

The Shift Operations Supervisor on duty is in direct charge of and has direct responsibility for the plant, including the startup, operation, and shutdown of the reactor and turbine generators. The Assistant Shift Operations Supervisor is under the immediate supervision of the Shift Operations Supervisor. This position is responsible for the operation of one unit or for specific plant areas.

The Unit Operator is under the immediate supervision of the Assistant Shift Operations Supervisor responsible for that unit and the general supervision of the Shift Operations Supervisor. This position performs those functions which require the attention of a licensed individual. This position is responsible for the safe and efficient operation of one unit from the control room or from local control stations.

The Assistant Unit Operator is under the immediate supervision of the Unit Operator and the general supervision of the Assistant Shift Operations Supervisor. This position performs assigned routine inspections and manipulative operations. This position assists in the operation and performs work requirements within the defined area of the plant.

The Shift Technical Advisor reports to the Shift Operations Supervisor in the control room during normal and off-normal operating plant conditions. The Shift Technical Advisor serves in an advisory capacity to the Shift Operations Supervisor.

The relief of any shift position is made such that the minimum required shift crew compliment is always maintained. Such reliefs are formal and appropriate responsibilities are transferred at the time of relief.

A duty radiochemical analyst is under the functional supervisor of the Shift Operations Supervisor. The analyst's duties consist of periodic sampling of reactor coolant, feedwater, main steam, condensate, and other plant process streams as required.

Duty health physics technicians are under the functional supervision of the Shift Operations Supervisor. They perform routine radiation surveys, personnel monitoring activities, and other assigned duties. These personnel keep the Shift Operations Supervisor informed of radiation hazards and perform special surveys as requested.

Work Control

The Work Control manager has the overall responsibility for ensuring that ongoing work activities during operating conditions and outages are executed in a timely and efficient manner. The manager develops overall work schedules and reviews all work requests.

Outage Schedule

The outage scheduling supervisor has overall responsibility for outage planning, coordination, and monitoring. The supervisor plans all outages, establishes work priorities, and coordinates shift turnover.

Chemistry and Environmental

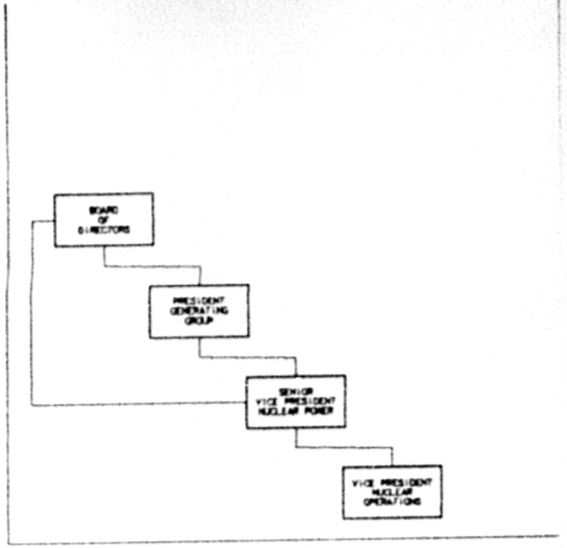
The Chemistry and Environmental Superintendent is responsible for implementation of effective site programs for plant chemistry, radiochemistry and environmental compliance.

d. Technical Support

The Technical Support Manager is responsible for technical direction and staff assistance in the area of systems engineering. Systems engineering includes nuclear, reactor, mechanical, chemical, electrical, and instrumentation and controls. Responsibilities include plant and equipment performance monitoring and tests, reactor engineering, integrated system operation and post modification and major maintenance testing.

Technical Support carries out a comprehensive program of plant tests, studies, and investigations for the purpose of monitoring the reactor, engineered safeguards, NSSS equipment, and balance-of-plant equipment directed at ensuring compliance with operating licenses, technical specifications, and improving plant and system efficiency.

NUCLEAR POWER
NUCLEAR OPERATIONS
WATTS BAR SITE
(PLANNED OPERATING ORGANIZATION)



VICE PRESIDENT NUCLEAR ASSURANCE, LICENSING & FUELS

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

VICE PRESIDENT WATTS BAR SITE

SITE QUALITY ASSURANCE

- QA AUDITS
- QC INSPECTIONS
- QUALITY IMPROVEMENT
- MONITORING
- QUALITY ENGINEERING REVIEWS
- MONITORING OF DESIGN PROCESS

SITE LICENSING MANAGER (~24)

- NRC LICENSES
- NRC COMPLIANCE
- NRC DOCUMENTATION
- COMMITMENT TRACKING
- NUCLEAR EXPERIENCE REVIEW

SITE EMPLOYEE RELATIONS & DEVELOPMENT MANAGER

- SITE HUMAN RESOURCES SUPPORT
- STAFFING
- LABOR RELATIONS
- EMPLOYEE COMMUNICATIONS
- COMPENSATION ADMINISTRATION
- AFFIRMATIVE ACTION & EEO

SITE SUPPORT MANAGER (~174)

- ADMINISTRATIVE SERVICES
- INDUSTRIAL SAFETY
- EMERGENCY PREPAREDNESS
- FACILITIES
- MATERIALS & PROCUREMENT
- SITE PROCEDURES
- CAQ PROGRAMS
- SITE ADP SECURITY & TRAINING
- SITE DOCUMENT CONTROL

SITE CONTROLLER (~17)

- INTEGRATED SCHEDULING
- BUDGETS, MULTI-YEAR PLANS
- SITE PERFORMANCE REPORTING
- FINANCIAL REPORTS
- ACCOUNTING & PAYROLL OPERATIONS

PLANT MANAGER (~746)

- MAINTENANCE
- OPERATIONS
- SCHEDULE/ WORK CONTROL
- CHEMISTRY & ENVIRONMENTAL
- RADIOLOGICAL CONTROL
- TECHNICAL SUPPORT
- TRAINING

ENGINEERING & MODIFICATIONS MANAGER (~321)

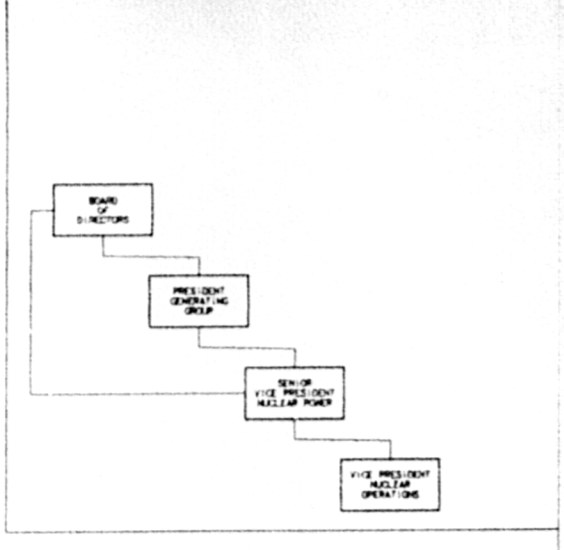
- OPERATING PLANT ENGINEERING SUPPORT
- ENGINEERING/DESIGN
- ENGINEERING CONTRACT MANAGEMENT
- PROJECT ENGINEERING CONTROLS
- PLANT MODIFICATIONS
- SITE CONSTRUCTION
- FIELD ENGINEERING
- CRAFT SUPPORT

– – – INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

FIGURE 5-6

TAG-FIG56

NUCLEAR POWER
NUCLEAR OPERATIONS
WATTS BAR SITE
PLANT MANAGER
(PLANNED OPERATING ORGANIZATION)



VICE PRESIDENT
WATTS BAR
SITE

NUCLEAR
TRAINING
MANAGER

PLANT
MANAGER

SITE
TRAINING
MANAGER

(~305)
MAINTENANCE
MANAGER

- PLANT POWER BLOCK MAINTENANCE PROGRAM

(~80)
RADIOLOGICAL
CONTROL
MANAGER

- RAD CONTROL MANAGEMENT
- ALARA
- RADIATION PROCEDURES, PROTECTION, TRAINING & MONITORING
- PERSONNEL EXPOSURE RECORDS
- RADIATION & CONTAMINATION LEVEL RECORDS
- RADIOLOGICAL WASTE & DECONTAMINATION MANAGEMENT

(~247)
PLANT
OPERATIONS
MANAGER

(~70)
TECHNICAL
SUPPORT
MANAGER

- SYSTEMS ENGINEERING
  - INSTRUMENTATION AND CONTROL
  - POST MODIFICATION TESTING
  - REACTOR ENGINEERING
  - NSSS SYSTEMS
- PERFORMANCE MONITORING

CHEMISTRY &
ENVIRONMENTAL
SUPERINTENDENT

- CHEMISTRY
- RADIOCHEMISTRY
- ENVIRONMENTAL COMPLIANCE

OPERATIONS
SUPERINTENDENT

- PLANT OPERATIONS
- REFUELING OPERATIONS MANAGEMENT
- OPERATIONAL TESTING
- WATER & WASTE PROCESSING
- OPERATIONS TRAINING

WORK CONTROL
MANAGER

- WORK REQUEST REVIEW
- OVERALL WORK SCHEDULES

OUTAGE
SCHEDULING
SUPERVISOR

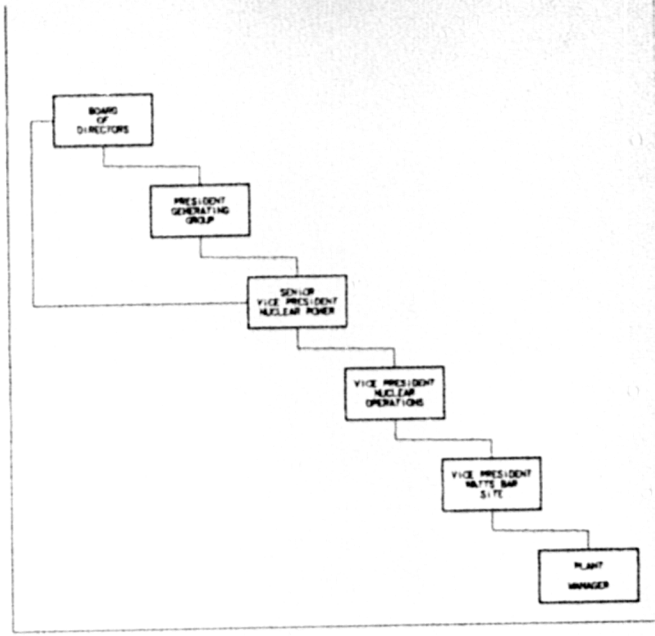
- OUTAGE PLANNING
- OUTAGE COORDINATION
- OUTAGE MONITORING & ASSESSMENT

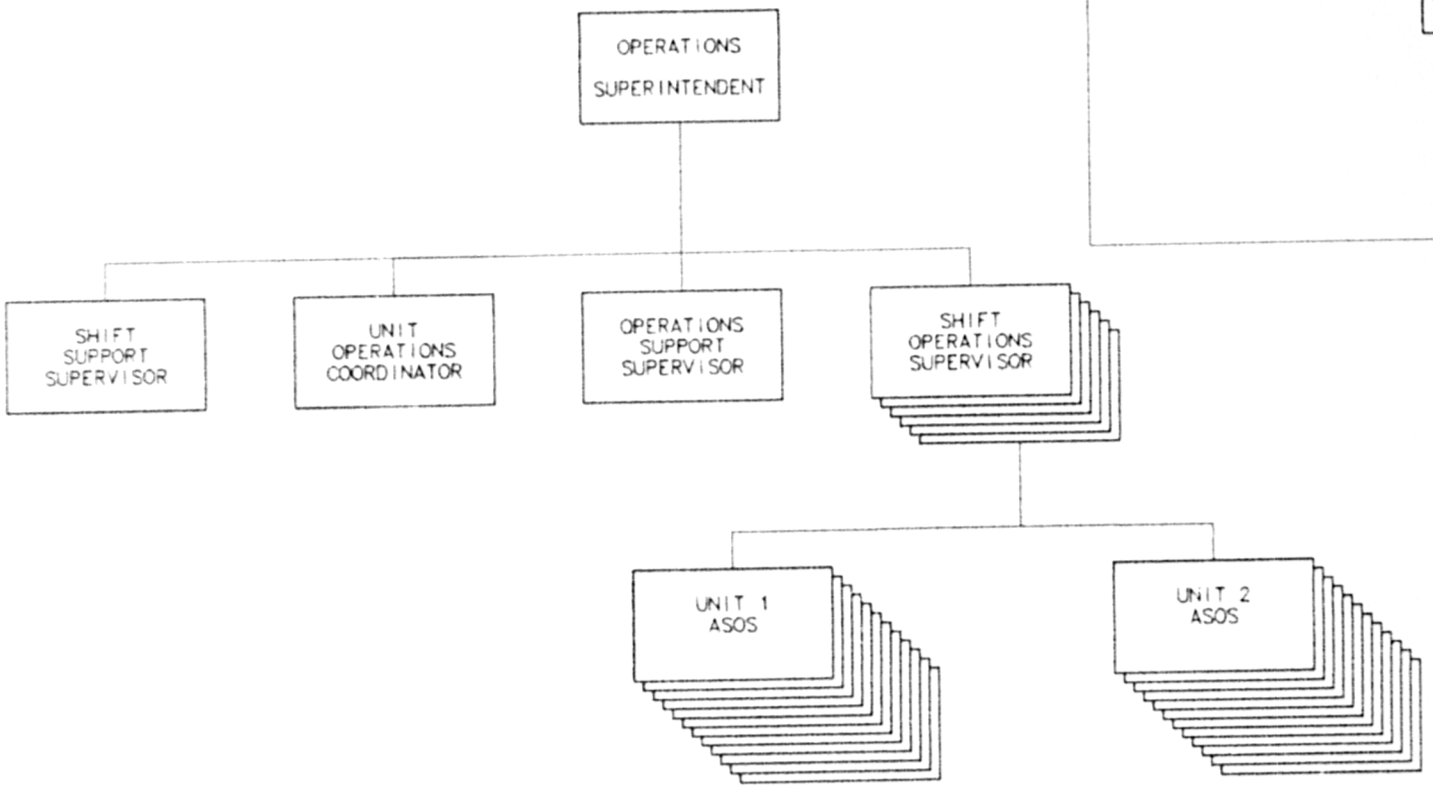
- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

TAG-FIG57

FIGURE 5-7

NUCLEAR POWER
NUCLEAR OPERATIONS
WATTS BAR SITE
PLANT MANAGER
PLANT OPERATIONS
OPERATIONS SUPERINTENDENT
(PLANNED OPERATING ORGANIZATION)





TAG-FIG58

FIGURE 5-8

6.0 Vice President, Completion Assurance (CA)

The Vice President, Completion Assurance, is responsible for overseeing efforts for the completion of recovery, construction, and licensing of the Watts Bar Nuclear site, ensuring that appropriate quality assurance programs and systems are developed, implemented, evaluated, reported, and problem resolutions are recommended. This includes direct management of the site QA and QC organizations, the Program for Assurance of Completion and Assurance of Quality (PAC/AQ), and inspection services. The Vice President, CA, also provides technical and/or consultation as appropriate in support of line management in areas such as welding, QA records, materials control, American Society for Mechanical Engineers programs, and process control improvements.

The Vice President, CA, is responsible for:

A. Oversight efforts directed toward completion of recovery, construction, and licensing of WBN.

B. Ensuring that appropriate quality assurance programs and systems for WBN is developed, implemented, evaluated, reported, and problem solutions are recommended (e.g., implementation of the ASME Section III Program).

C. Auditing, inspecting, and monitoring the conduct of TVA activities at WBN to ensure that they provide the required high degree of safety and reliability and are carried out consistent with applicable laws, regulations, regulatory commitments, licenses, and other requirements.

D. Directing and managing the Completion Assurance organization.

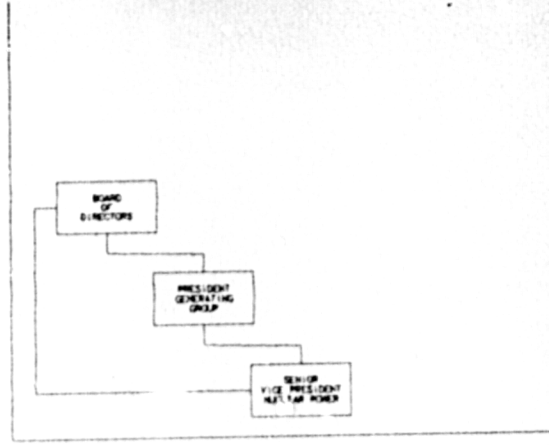
E. Performing assessments on a planned and periodic basis to comprehensively determine the effectiveness of the program and its implementation at WBN and submitting results of assessments to the Senior Vice President, Nuclear Power, and affected vice presidents.

F. Stopping work or further processing, delivery, or installation or taking other comparable actions when warranted to control and/or prevent the use of nonconforming materials or continuance of activities adverse to quality at WBN.

Descriptions of the completion Assurance organization and responsibilities are described in detail in TVA's Nuclear Quality Assurance Plan-NQA-PLN 89-A.

See Figure 6-1 for Completion Assurance organization chart.

NUCLEAR POWER
COMPLETION ASSURANCE



VICE PRESIDENT
COMPLETION
ASSURANCE

(3)

(~85)

WATTS BAR
QUALITY ASSURANCE
MANAGER

- INSPECTIONS
- AUDITS
- ASSESSMENTS

(~80)

INSPECTION
SERVICES
MANAGER

- OUTAGE INSPECTION SUPPORT
- NDE PROGRAM
- QC CERTIFICATION
- ASME SECTION XI SUPPORT

(~2)

WBN QA
RECORDS
PROJECT MANAGER

- QA RECORDS
- QC RECORDS

(~2)

PROGRAM MANAGER
(ASSURANCE OF COMPLETION
& ASSURANCE OF QUALITY)

- COMMITMENT CATALOGING AND VERIFICATION OF IMPLEMENTATION

FIGURE 6-1

TAC-FIG61

7.0 Vice President, New Generation and Quality

The Vice President, New Generation and Quality is responsible for developing a Total Quality (TQ) Plan for Nuclear Power (NP) that will ensure that all activities embrace the concept of TQ.

The Vice President, New Generation and Quality is responsible for integrating the overall new generation strategic goals and objectives for new NP production and availability for the Tennessee Valley Region and its customers. This includes site identification and licensing, procurement strategy, development, and ultimate licensing of second generation nuclear power plants.

See Figure 7-1 for the Vice President, New Generation and Quality organization chart.

7.1 New Generation Development (NG)

The Manager, New Generation Development, reports to the Vice President, New Generation & Quality, and is responsible for identifying strategies and developing and implementing programs leading to decisions for TVA to procure/contract new nuclear generating plants. Responsible activities performed include:

A. Maintains cognizance and manages TVA participation in industry activities involving EPRI, DOE, and NSSS suppliers.

B. Participates in licensing approach development by NUMARC, NPOC, and NRC.

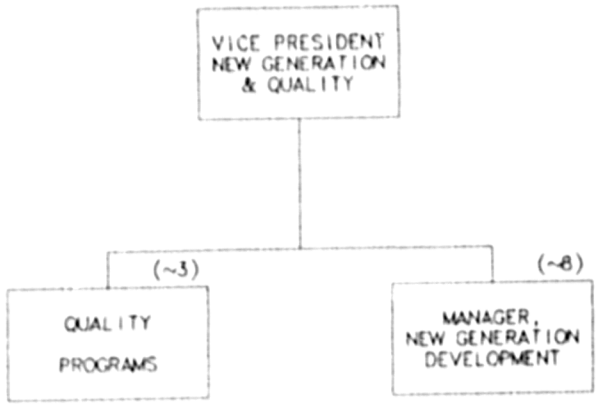
C. Identifies and secures regulatory approval for potential new nuclear plant sites within the TVA system.

D. Implements programs necessary to address plant life extension of existing nuclear facilities.

7.2 Quality Programs

Quality Programs managers are responsible for overseeing the conceptual and detail development of TQ processes related to customer/supplier relationships, product/process improvements, employee empowerment, and leadership principles. They provide assistance in developing guidelines and processes for the integration of quality planning into business within all NP organizations.

NUCLEAR POWER
NEW GENERATIONS AND QUALITY



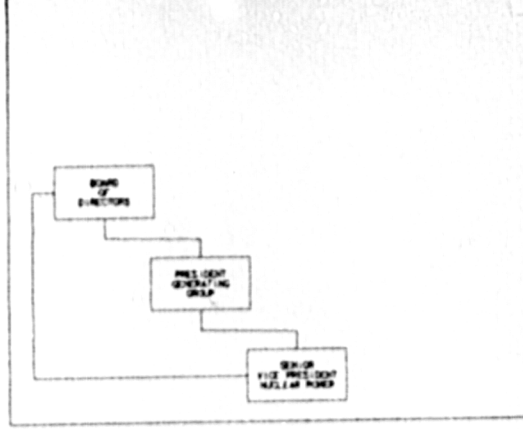


FIGURE 7-1