Topical Report
TVA-NPOD89-A
Rev. 4

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 Capital Projects organization in the Generating Group, provides oversight and management for major project planning and scheduling for the Generating Group including Nuclear Power. 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 of Nuclear Employee Relations & Development; the vice presidents of Technical Support; Nuclear Operations; and Nuclear Projects.

The Senior Vice President, Nuclear Power, accomplishes the responsibilities through three vice presidents, the Nuclear Employee Relations & Development (NERD), and Materials Management groups. The Vice Presidents' functions are described in the following sections. The NERD and Materials Management groups are discussed below.

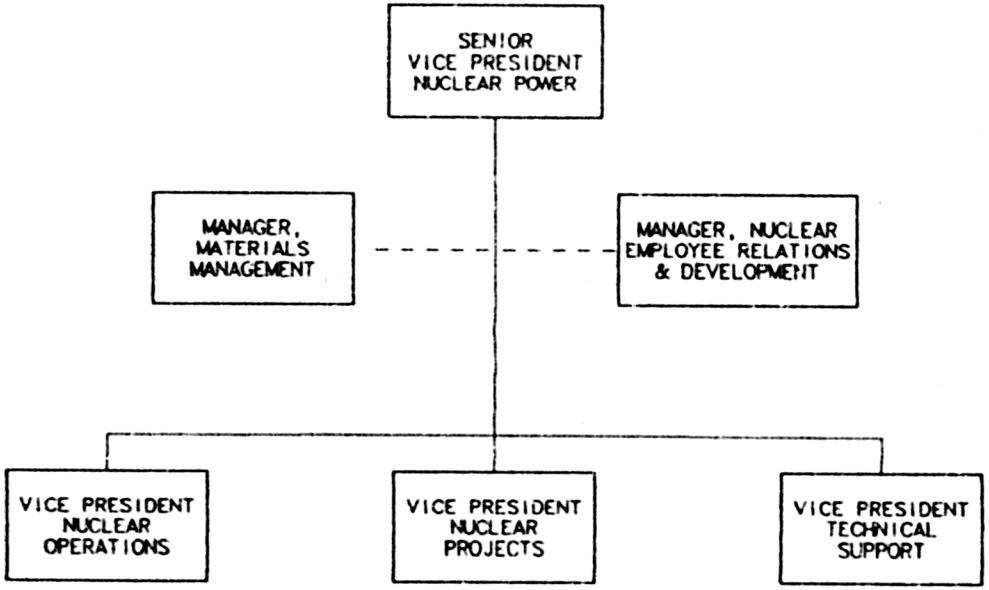
Nuclear Employee Relations & Development (NERD)

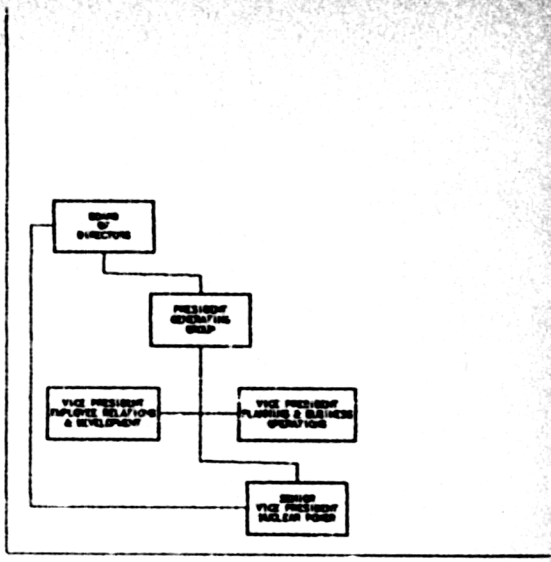
The Manager of Nuclear Employee Relations & Development is responsible for developing, coordinating, directing, and managing a viable human resources program for NP. Elements of the program include staffing and employment, compensation administration, labor relations, affirmative action and equal opportunity employment, employee communication, organization development, human resource policy and procedures development, and management development and training. 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. the Manager, NERD reports administratively to the Vice President, Employee Relations and Development, Generating Group.

Manager Materials Management

The Manager Materials Management is responsible for development, coordination, and implementation of the materials management and procurement program for Nuclear Power. In addition, this 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. The Manager Materials Management reports administratively to the Vice President, Planning and Business Operations, Generating Group.

NUCLEAR POWER





--- THESE POSITION ARE ADMINISTRATIVE.
REPORTS TO GENERATING GROUP VPs.

TAC-FIG11

FIGURE 1-1

2.0 Vice President, Technical Support (TS)

The Vice President, TS, is responsible for the general management and oversight of the programmatic activities of quality assurance, licensing, nuclear fuel, employee concerns, business planning, nuclear experience review, industry programs, Nuclear Safety Review Board, nuclear support and corporate engineering. Management support to other organizations within NP is provided in the areas of nuclear procedures system, document control, and records management. In addition, TS provides oversight coordination of reviews and evaluation of NP activities including quality performance.

The Vice President, TS has eight principal reports and accomplishes responsibilities through the following:

General Manager, Operations Services
General Manager, Nuclear Support
General Manager, Nuclear Assurance
Chairman, Nuclear Safety Review Board
Manager, Nuclear Licensing & Regulatory Affairs
Manager, Nuclear Business Operations
Manager, Concerns Resolution
Manager, Corporate Engineering & Modifications

See Figure 2-1 for TS Organization Chart

2.1 General Manager, Operations Services (OS)

The General Manager, Operations Services is responsible for providing necessary oversight 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 General Manager, OS has four principal reports and administers responsibilities through the following managers:

Manager, Technical Programs
Manager, Operations and Maintenance
Manager, Nuclear Training
Manager, Performance Assessment

See Figure 2-2 for the OS organization chart.

2.1.1 Technical Programs (TP)

The Manager, TP, reports to the General Manager, OS, 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. The Manager, TP ensures the suitability of employees service by the implementation of the Fitness for Duty Program.

2.1.2 Operations and Maintenance (O&M)

The Manager, O&M, reports to the General Manager, OS and 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.

2.1.3 Nuclear Training (NT)

The Manager, NT reports to the General Manager, 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 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.

2.1.4 Manager, Performance Assessment

The Manager, Performance Assessment, reports to the General Manager, OS and is responsible for the goal setting and performance reporting program. The manager has direct functional responsibilities for the Nuclear Power Industrial Engineering program and performance of special productivity improvement evaluations.
The Manager, Performance Assessment, manages the business plan development and implementation for the OS organization.

2.2 Nuclear Assurance (NA)

The General Manager, NA, reports directly to the Vice President, TS, 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 Experience Review/Safety Engineering, Quality Programs, site Quality Managers (SQN & WBN), site Nuclear Assurance and Licensing Managers (BFN & BLN), and the Senior Consultant.

The General Manager, NA, is responsible for:

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 assessing the conduct of activities at Corporate and Nuclear Sites 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 and Nuclear Sites 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 and Nuclear Sites;

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.

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

2.3 Nuclear Licensing & Regulatory Affairs (NL&RA)

The Manager, NL&RA, reports to the Vice President, TS, 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; and

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.

2.4 Nuclear Business Operations

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

2.5 Concerns Resolution

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.

2.6 Manager, Corporate Engineering & Modifications

The Manager, Corporate Engineering & Modifications, reports to the Vice President, TS, 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 Corporate Engineering & Modifications.

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

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

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

E. Establishment of design and configuration controls;

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

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

H. Maintaining the integrity and technical adequacy of engineering and design of NP facilities throughout their operating life.

The Manager, Corporate Engineering & Modifications, 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 2-3 for the Corporate Engineering & Modifications organization chart.

2.7 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.

2.8 Nuclear Support (NS)

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

Nuclear Information Planning and Projects Manager
Administrative Support and Procedures Manager
Contracts and Procurement Manager
Nuclear Fuels Manager

2.8.1 Nuclear Information Planning and Projects Manager (NIPP)

The Nuclear Information Planning and Projects Manager is responsible for both strategic and tactical planning for the effective use of information resources and information technology within NP. This manager is also responsible for providing real time computer services in direct support of the nuclear sites and corporate staff. Additionally, the NIPP Manager provides project management for NP-wide information management projects, work controls for information resource utilization, and defines the requirements for implementation of computer hardware and software in safety-related applications.

2.8.2 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 NP system of standards and business practices and acts as the liaison with corporate information systems.

2.8.3 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.

2.8.4 Nuclear Fuels

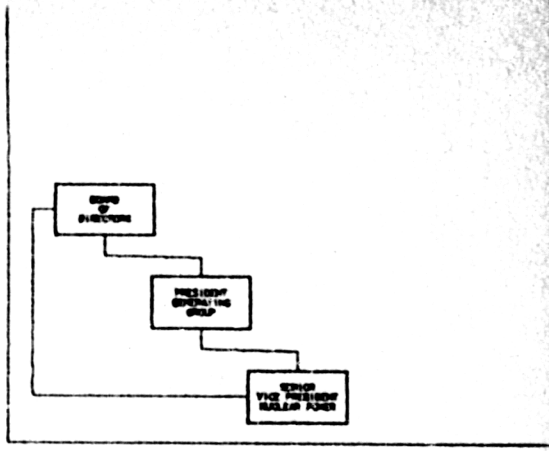
The Nuclear Fuels Manager reports to the General Manager NS, and is responsible for the following:

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.

NUCLEAR POWER ORGANIZATION CHART
TECHNICAL SUPPORT

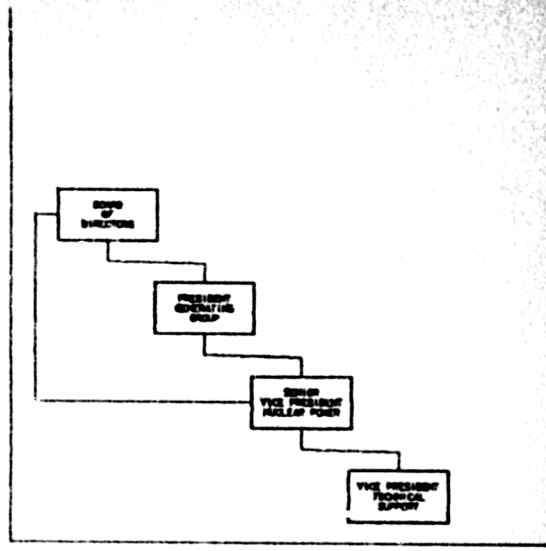


VICE PRESIDENT TECHNICAL SUPPORT

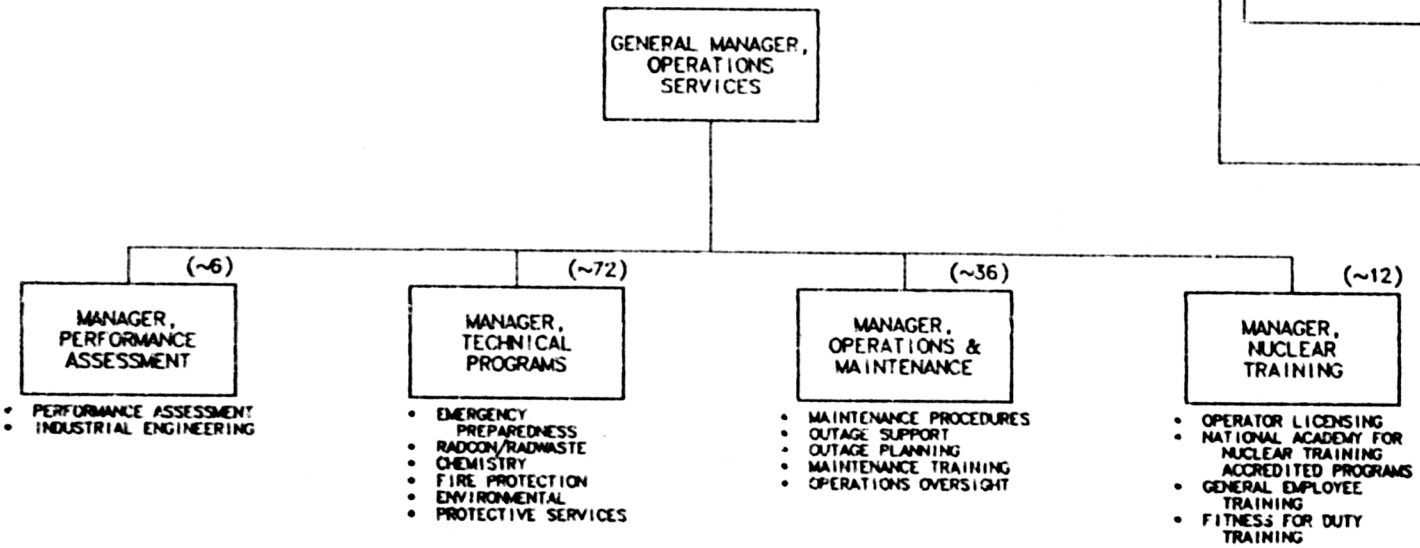
- **MANAGER, CORPORATE ENGINEERING & MODIFICATIONS** (~175)
  - RISK ASSESSMENT
  - ENGINEERING APPLICATIONS
  - INSTRUMENTATION & CONTROLS
  - ELECTRICAL
  - MECHANICAL SYSTEMS
  - NUCLEAR ANALYSIS
  - STRUCTURAL
  - ENGINEERING MECHANICS
  - MODIFICATIONS SUPPORT
  - MATERIAL & INSPECTIONS ENGINEERING
  - ASME CODES
  - NDE REQUIREMENTS
  - COMPUTER CODES
- **GENERAL MANAGER, NUCLEAR SUPPORT** (~90)
  - NUCLEAR CONTRACTS & PROCUREMENT
  - NUCLEAR PROCEDURES
  - DOCUMENT CONTROL
  - ADMINISTRATIVE SUPPORT
  - NUCLEAR INFORMATION PLANNING PROJECT
  - NUCLEAR FUELS
- **MANAGER, NUCLEAR LICENSING & REGULATORY AFFAIRS** (~14)
  - LICENSING OVERSIGHT
  - INDUSTRY PROGRAMS
  - PRIMARY NRC INTERFACE
  - LICENSES & PERMITS
- **MANAGER, CONCERNS RESOLUTION STAFF** (~7)
  - EMPLOYEE CONCERNS
- **GENERAL MANAGER, OPERATIONS SERVICES** (~128)
  - TECHNICAL PROGRAMS
  - OPERATIONS & MAINTENANCE
  - NUCLEAR TRAINING
  - PERFORMANCE ASSESSMENT
  - INDUSTRIAL ENGINEERING
- **MANAGER, NUCLEAR BUSINESS OPERATIONS** (~27)
  - BUSINESS PLANNING
  - BUDGETING
  - REPORTING
- **GENERAL MANAGER, NUCLEAR ASSURANCE** (~53)
  - QA
  - QC
  - SITE QA/QC
  - INDEPENDENT SAFETY ENGINEERING
  - NUCLEAR EXPERIENCE REVIEWS
  - NSRB SUPPORT
- **CHAIRMAN NUCLEAR SAFETY REVIEW BOARD**
  - NUCLEAR SAFETY REVIEW BOARDS

TAG-FIG21

FIGURE 2-1



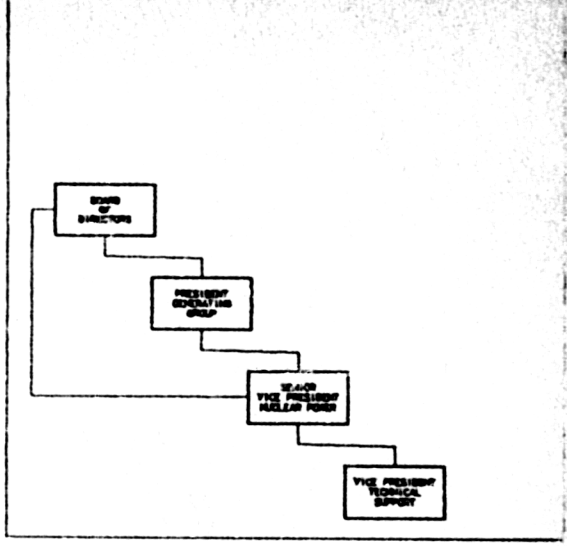
NUCLEAR POWER TECHNICAL SUPPORT OPERATIONS SERVICES



TAG-FIG22

FIGURE 2-2

NUCLEAR POWER
TECHNICAL SUPPORT
CORPORATE ENGINEERING



MANAGER, CORPORATE ENGINEERING & MODIFICATIONS

(~5)
PROJECT ENGINEER

(~13)
MANAGER, ELECTRICAL ENGINEERING
- ELECTRICAL DESIGN REQUIREMENTS
- ENVIRONMENTAL QUALIFICATION
- ELECTRICAL CALCULATIONS
- DESIGN STANDARDS
- SECURITY SYSTEMS
- HEAT TRACING

(~25)
MANAGER, MECHANICAL/ NUCLEAR ENGINEERING
- NSS & BOP SYSTEMS
- THERMAL HYDRAULICS
- PRA
- COMPUTER CODES & METHODS
- FIRE PROTECTION
- HVAC
- RADWASTE

(~8)
MANAGER, I & C ENGINEERING
- INSTRUMENT APPLICATIONS
- ENVIRONMENTAL QUALIFICATIONS
- HUMAN FACTORS ENGINEERING
- POST ACCIDENT MONITORING
- COMPUTER SYSTEMS
- EMI/RFI
- CONTROL SYSTEMS

(~15)
MANAGER, CIVIL ENGINEERING
- CONCRETE
- ANCHORAGE
- BASEPLATES
- PIP SUPPORTS
- CONTAINMENT ANALYSIS
- EARTHQUAKE ENGINEERING
- PIPE RUPTURE
- EQUIPMENT QUALIFICATION
- RADATION SHIELDING

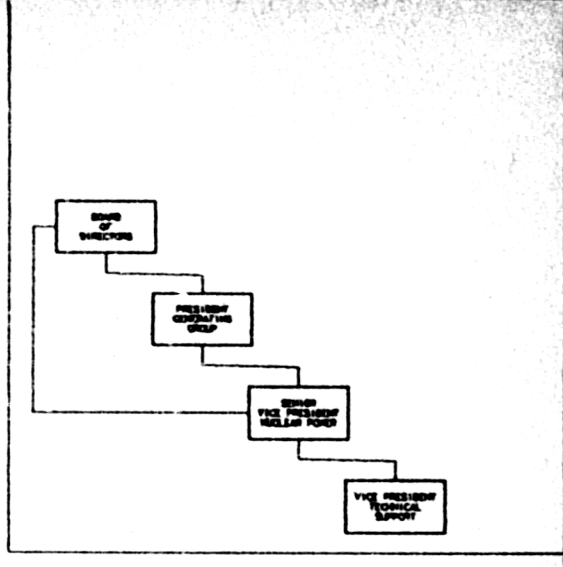
(~93)
MANAGER, MATERIALS & INSPECTION ENGINEERING
- MATERIAL SELECTION
- WELDING/SPECIAL PROCESSES
- CORROSIVE CONTROL
- COATINGS
- SECTION III/XI PROGRAMS
- NDE

(~13)
MANAGER, ENGINEERING APPLICATIONS
- ENGINEERING WORK MANAGEMENT
- DESIGN ENGINEEERING PROGRAM
- DESIGN CHANGE PROGRAM
- CONFIGURATION MANAGEMENT INFORMATION

(~2)
MANAGER, CORPORATE MODIFICATIONS
- CONSTRUCTION PROCEDURES
- INDUSTRY CODES & STANDARDS
- GENERIC REVIEWS

TAG-FIG23

FIGURE 2-3



NUCLEAR POWER
TECHNICAL SUPPORT
NUCLEAR SUPPORT

GENERAL MANAGER, NUCLEAR SUPPORT

ADMINISTRATIVE SUPPORT & PROCEDURES MANAGER (~20)

- CONTROL DISTRIBUTE NP DOCUMENTS/RECORDS
- OVERSIGHT ASSESSMENT SUPPORT
- CECC SUPPORT
- COMPLIANCE ASSESSMENTS
- PROCESS ANALYSIS

CONTRACTS & PROCUREMENT MANAGER (~12)

- CONTRACT PLANNING
- CONTRACT ADMINISTRATION
- I.G. AUDITS
- BENCHMARKING
- DIVERSITY DEVELOPMENT

NUCLEAR INFORMATION PLANNING & PROJECTS MANAGER (~30)

- TECHNOLOGY & PROCESS STANDARDIZATION
- INFORMATION RESOURCE WORK CONTROL
- REALTIME COMPUTER SYSTEM DEVELOPMENT/SUPPORT
- NP DATA MANAGEMENT PLANNING
- DATA MANAGEMENT SYSTEM IMPLEMENTATION

NUCLEAR FUELS MANAGER (~25)

- FUEL CYCLE MANAGEMENT
- URANIUM ASSESSMENT MANAGEMENT
- SNM ACCOUNTABILITY

TAG-FIG24

FIGURE 2-4

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.

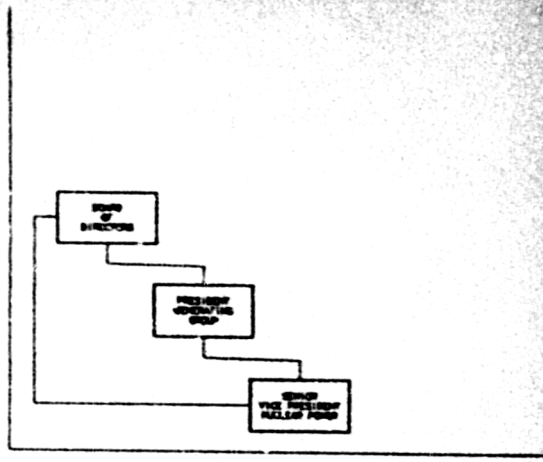
The Vice President, Nuclear Operations has three principal reports and administers responsibilities through them. These principal reports are as follows:

Vice President, Nuclear Readiness
Vice President, Browns Ferry Site (BFN)
Vice President, Sequoyah Site (SQN)

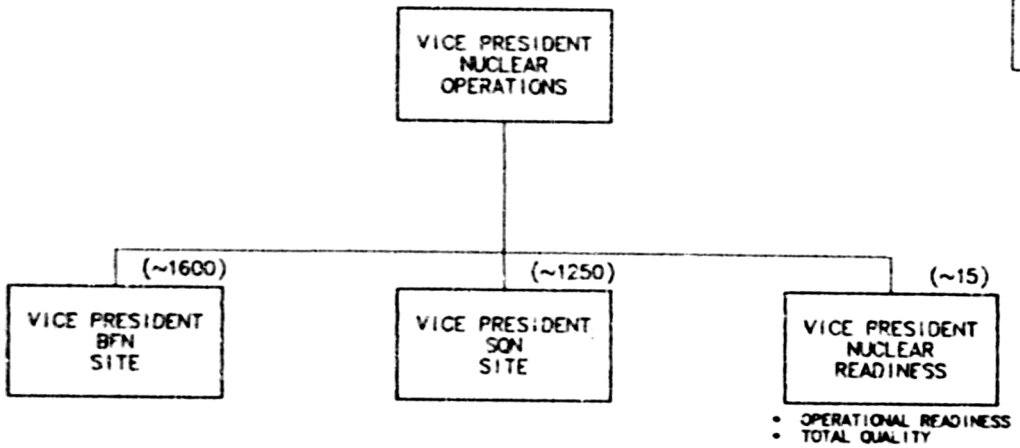
See Figure 3-1 for the Nuclear Operations organization chart.

3.1 Vice President, Nuclear Readiness

The Vice President, Nuclear Readiness is responsible for development, implementation, and oversight of Operational Readiness and Total Quality programs for the Nuclear Power organization.



NUCLEAR POWER
NUCLEAR OPERATIONS



TAG-FIG31

FIGURE 3-1

3.2 Vice President, Browns Ferry Site (BFN)

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

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

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

The Site Nuclear Assurance and Licensing Manager reports only functionally to the Vice President, BFN.

See Figure 3-2 for the BFN organization chart.

3.2.1 Site Support

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

a. Management services;

b. Site industrial safety support;

c. Onsite radiological emergency preparedness program;

d. Site procedures;

e. Site security;

f. Onsite management interface and coordination of site information systems; and

g. Total Quality.

3.2.2 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.

3.2.3 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, including both outage and recovery. This responsibility includes providing administrative and functional direction on scope, schedule, budget, and provide the manpower to perform assigned tasks. Corporate Engineering & Modifications is responsible for establishment of design and configuration controls, establishment and maintenance of engineering standards and processes, and monitoring oversight of engineering activities of the sites.

3.2.4 Site Licensing Manager

The Site Licensing Manager reports to the Manager, Nuclear Assurance and Licensing (BFN) and is responsible for the following activities:

a. Serving as the principal onsite 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 generic issues and the commitment tracking programs.

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

3.2.5 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 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 five principal areas of responsibility and administers them through the following managers:

Maintenance Manager
RadChem Manager
Outage Manager
Technical Support Manager
Plant Operations Manager

The Training Manager reports only functionally to the Plant Manager.

See Figure 3-3 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 Customer Group 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 Customer Group-Muscle Shoals Area Manager and under the functional supervision of the plant Maintenance Planing and Technical Manager.

b. Radiological Control and Chemistry

The RadChem Manager is responsible for radiological control and chemistry 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 RadChem 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. The RadChem Manager is responsible for implementation of effective site programs for plant chemistry, radiochemistry and environmental compliance.

c. Outage Scheduling

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

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.

e. Plant Operations Manager

The Plant Operations Manager has responsibility for planning, organizing, setting policy, and motivation relating to the Operations, Fire Operations, and Work Control Group personnel. These activities include operational strategies for generation, 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 Fire Protection are grouped under one manager responsible for facility generation (i.e., Plant Operations Manager).

The Plant Operations Manager has three principal reports:

Operations Superintendent
Work Control Supervisor
Fire Protection Manager

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.

The shift crew for one unit operating normally consist of the Shift Operations Supervisor (SRO), Assistant Shift Operations Supervisor (SRO), Unit Operators (RO), and Assistant Unit Operators (AUOs). Additional licensed and non-licensed personnel are 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 3-4 for the Operations Superintendent organization chart.

Shift Crew Composition:

The Shift Operations Supervisor (SOS) 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 and their auxiliaries. The Assistant Shift Operations Supervisor (ASOS) 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. During emergencies, 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.

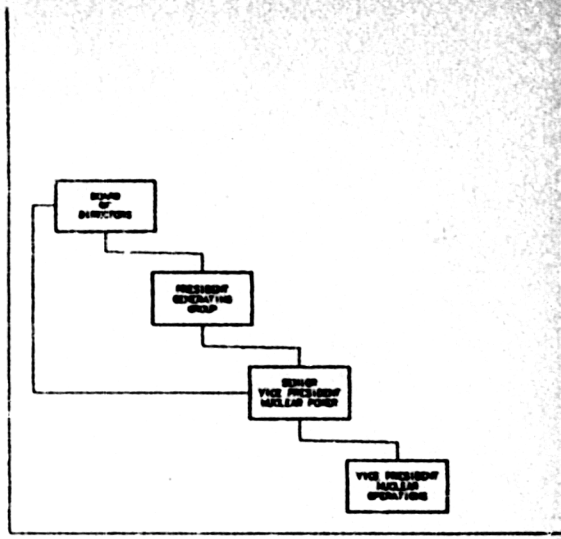
Work Control

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

Fire Protection

The Fire Protection Manager has the overall responsibility for the fire protection program including; fire protection equipment inspections, transient fire loads, breaching permits, and emergency response to fires, medical emergencies, and hazardous material spills.

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



GENERAL MANAGER NUCLEAR ASSURANCE

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

VICE PRESIDENT BROWNS FERRY SITE

NUCLEAR ASSURANCE & LICENSING (BNF)

SITE EMPLOYEE RELATIONS & DEVELOPMENT MANAGER

SITE SUPPORT MANAGER (~190)

UNIT 3 & 1 RECOVERY COORDINATION MANAGER

SITE CONTROLLER (~40)

PLANT MANAGER (~1085)

ENGINEERING & MODIFICATIONS MANAGER (~480)

QUALITY ASSURANCE
- QA AUDITS
- QC INSPECTIONS
- QUALITY IMPROVEMENT
- MONITORING
- QUALITY ENGINEERING REVIEWS
- MONITORING OF DESIGN PROCESS
- NUCLEAR EXPERIENCE REVIEW
- CORRECTIVE ACTION

LICENSING
- NRC LICENSES
- NRC COMPLIANCE
- NRC DOCUMENTATION
- COMMITMENT TRACKING

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

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

- RECOVERY SCHEDULE
- OUTAGE ACTIVITIES
- PRIORTIZE WORK ITEMS
- RESTART TRANSITION
- CONTROL WORK SCOPE

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

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

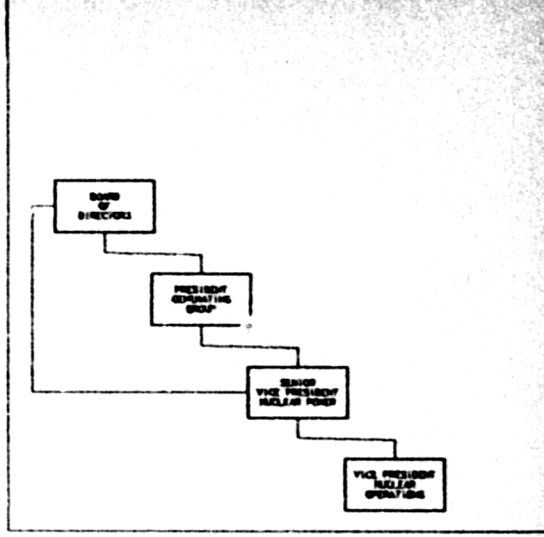
- OPERATING PLANT ENGINEERING SUPPORT
- ENGINEERING/DESIGN
- ENGINEERING CONTRACT MANAGEMENT
- PROJECT ENGINEERING CONTROLS
- PLANT MODIFICATIONS
- SITE CONSTRUCTION
- FIELD ENGINEERING
- CRAFT SUPPORT
- MATERIALS & PROCUREMENT
- INTEGRATED SCHEDULING

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

TAG-FIG32

FIGURE 3-2

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



VICE PRESIDENT BFN SITE

PLANT MANAGER

NUCLEAR TRAINING MANAGER

- GENERAL EMPLOYEE TRAINING (GET)
- ACCREDITED OPERATIONS TRAINING
- ACCREDITED RADCON & CHEMISTRY TRAINING
- ACCREDITED MAINTENANCE & ENGINEERING TRAINING

TRAINING MANAGER

(~475)

MAINTENANCE MANAGER

- PLANT POWER BLOCK MAINTENANCE PROGRAM

(~175)

RADCHEM MANAGER

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

(~340)

PLANT OPERATIONS MANAGER

(~95)

TECHNICAL SUPPORT MANAGER

- SYSTEMS ENGINEERING
  - INSTRUMENTATION AND CONTROL
  - POST MODIFICATION TESTING
  - REACTOR ENGINEERING
  - NSSS SYSTEMS
- PERFORMANCE MONITORING
- FIRE PROTECTION
- APPENDIX J

OUTAGE MANAGER

- OUTAGE PLANNING
- WORK PRIORITIES
- SCHEDULING

PROGRAM MANAGER

OPERATIONS SUPERINTENDENT

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

FIRE PROTECTION MANAGER

- FIRE ENGINEERING
- SURVEILLANCE
- FIRE TRAINING

WORK CONTROL SUPERVISOR

- WORK REQUEST REVIEW
- OVERALL WORK SCHEDULES

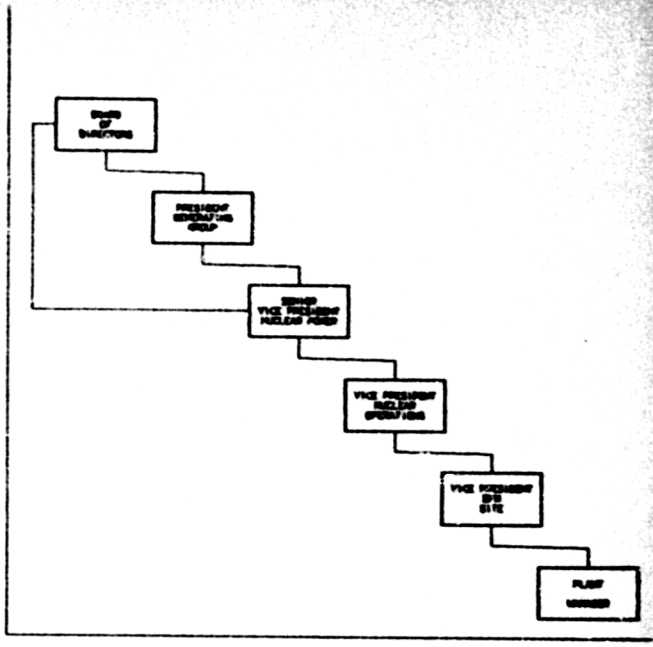
PROGRAM MANAGER

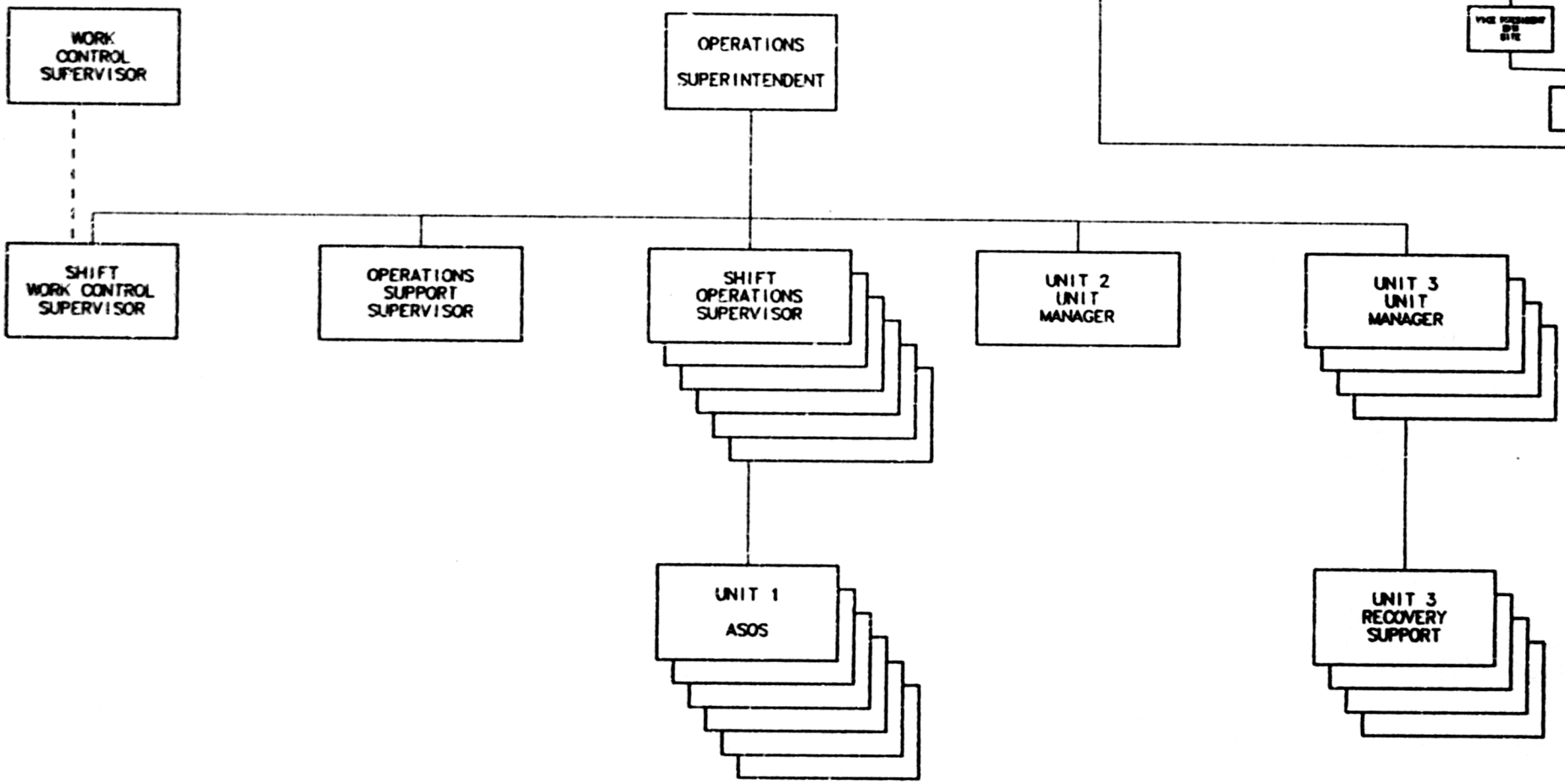
- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

TAG-FIG33

FIGURE 3-3

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





TAG-FIG34

FIGURE 3-4

3.3 Vice President, Sequoyah 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 3-5 for the SQN 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 Information Services.

3.3.2 Site Controller

The Site Controller is responsible for providing financial support to site management, including accounting, payroll, budget, and reporting. The Site Controller is responsible for preparation of all budgets, capital project proposals, multiyear plans, and special financial management and accounting procedures and instructions; and establishment of systems for measuring and reporting site financial performance to ensure proper management control.

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. The Engineering and Modifications Manager is responsible for materials and procurement. This position has oversight responsibility for the site purchasing representative and the site contracts and procurement organization. Corporate Engineering & Modifications is responsible for establishment of design and configuration controls, 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 onsite 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;

e. Serves as interface for QA/NMRG/ANI/NML audits; and

f. Responsible for INPO coordination.

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 has five principal reports and administers responsibilities through the following managers:

Maintenance Manager
Radiological and Chemistry Manager
Planning and Scheduling Manager
Technical Support Manager
Operations Manager

The Training Manager reports only functionally to the Plant Manager.

See Figure 3-6 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 Customer Group 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 Customer Group-Muscle Shoals Area Manager and under the functional supervision of the Plant Electrical Maintenance Manager.

b. Radiological and Chemistry

The Radiological and Chemistry Manager is responsible for radiological control and chemistry 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 and Chemistry 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. The Radiological and Chemistry Manager is responsible for implementation of effective site programs for plant chemistry, radiochemistry and environmental compliance.

c. Planning and Scheduling

The Planning and Scheduling 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. The Planning and Scheduling Manager is responsible for outage planning, coordination, and monitoring. The manager plans all outages and establishes work priorities.

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.

e. Operations Manager

The Operations Manager has responsibility for planning, organizing, setting policy, and motivation relating to the Operations, Fire Operations, Operations Support personnel. These activities include operational strategies for generation, fire protection, water and waste usage, approved authority for system enhancements, and performance monitoring activities. To meet these objectives, related functions are grouped under one manager responsible for facility generation (i.e., Operations Manager).

The Operations Manager has four principal reports:

Operations Superintendent
Fire Operations Manager
Operations Support Manager
Program Manager

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 3-7 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.

Fire Operations

The Fire Operations Manager has the overall responsibility for the fire protection program including; fire protection equipment inspections, transient fire loads, breaching permits, and emergency response to fires, medical emergencies, and hazardous material spills.

Operations Support

The Operations Support Manager provides support to the operations organization through procedure development, development and oversight of the maintenance program, final maintenance rule implementation and implementation of the training candidate program.

Program Manager

The Program Manager is responsible for budget preparation, Training oversight, performance monitoring, and assist the Operations Manager in overall program direction for operations.

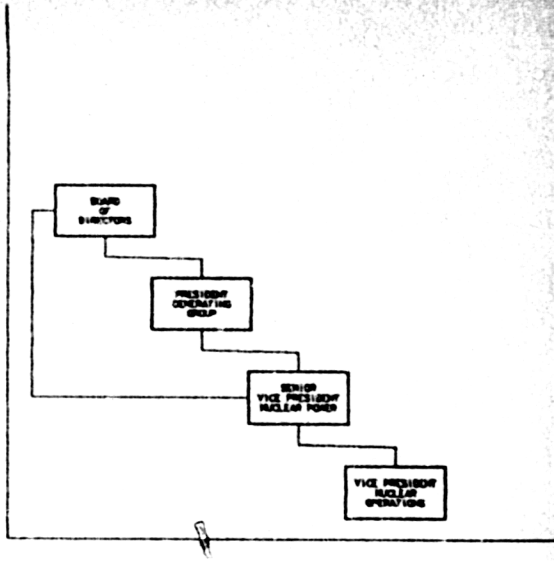
4.0 Vice President, Nuclear Projects

The Vice President, Nuclear Projects, is responsible for Watts Bar and Bellefonte startup. 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 two principal reports and administers responsibilities through the following:

Vice President, Bellefonte Site
Vice President, Watts Bar Site

See Figure 4-1 for the Vice President, Nuclear Projects, organization chart.

NUCLEAR POWER
NUCLEAR OPERATIONS
SEQUOYAH SITE



VICE PRESIDENT TECHNICAL SUPPORT

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

VICE PRESIDENT SEQUOYAH SITE

(~60) **SITE QUALITY MANAGER**

- QA AUDITS
- QC INSPECTIONS
- QUALITY IMPROVEMENT
- ASSESSING
- QUALITY ENGINEERING REVIEWS
- ASSESSING OF DESIGN PROCESS
- NUCLEAR EXPERIENCE REVIEW
- CAQ PROGRAMS

(~17) **SITE LICENSING MANAGER**

- NRC LICENSES
- NRC COMPLIANCE
- NRC DOCUMENTATION
- COMMITMENT TRACKING

(~14) **SITE EMPLOYEE RELATIONS & DEVELOPMENT MANAGER**

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

(~310) **SITE SUPPORT MANAGER**

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

(~15) **SITE CONTROLLER**

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

(~790) **PLANT MANAGER**

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

(~260) **ENGINEERING & MODIFICATIONS MANAGER**

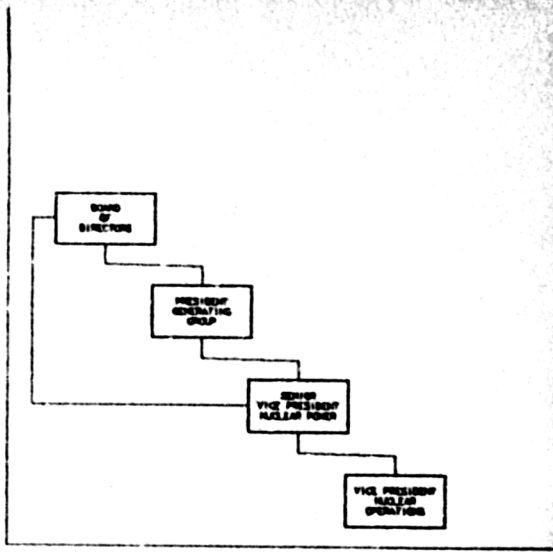
- OPERATING PLANT ENGINEERING SUPPORT
- ENGINEERING/DESIGN
- ENGINEERING CONTRACT MANAGEMENT
- PROJECT MANAGEMENT & CONTROLS
- PLANT MODIFICATIONS
- SITE CONSTRUCTION
- FIELD ENGINEERING
- CRAFT SUPPORT
- MATERIAL & PROCUREMENT
- PURCHASING
- CONTRACTS & PROCUREMENT

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

TAG-FIG35

FIGURE 3-5

NUCLEAR POWER
NUCLEAR OPERATIONS
SEQUOYAH SITE
PLANT MANAGER



VICE PRESIDENT SQN SITE

PLANT MANAGER

NUCLEAR TRAINING MANAGER

(~20)

TRAINING MANAGER

- GENERAL EMPLOYEE TRAINING (GET)
- ACCREDITATED OPERATIONS TRAINING
- ACCREDITATED RADCON & CHEMISTRY TRAINING
- ACCREDITATED MAINTENANCE & ENGINEERING TRAINING

(~340)

MAINTENANCE MANAGER

- PLANT POWER BLOCK MAINTENANCE PROGRAM

(~115)

RADIOLOGICAL & CHEMISTRY MANAGER

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

(~240)

OPERATIONS MANAGER

(~75)

TECHNICAL SUPPORT MANAGER

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

PLANNING & SCHEDULING MANAGER

- OUTAGE PLANNING
- MAINTENANCE PLANNING
- DAILY SCHEDULING & PROJECT CONTROL

OPERATIONS SUPERINTENDENT

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

FIRE OPERATIONS MANAGER

- FIRE ENGINEERING
- SURVEILLANCE
- FIRE TRAINING

OPERATIONS SUPPORT MANAGER

- OUTAGE SUPPORT
- WP/DCN REVIEWS
- PROCEDURES

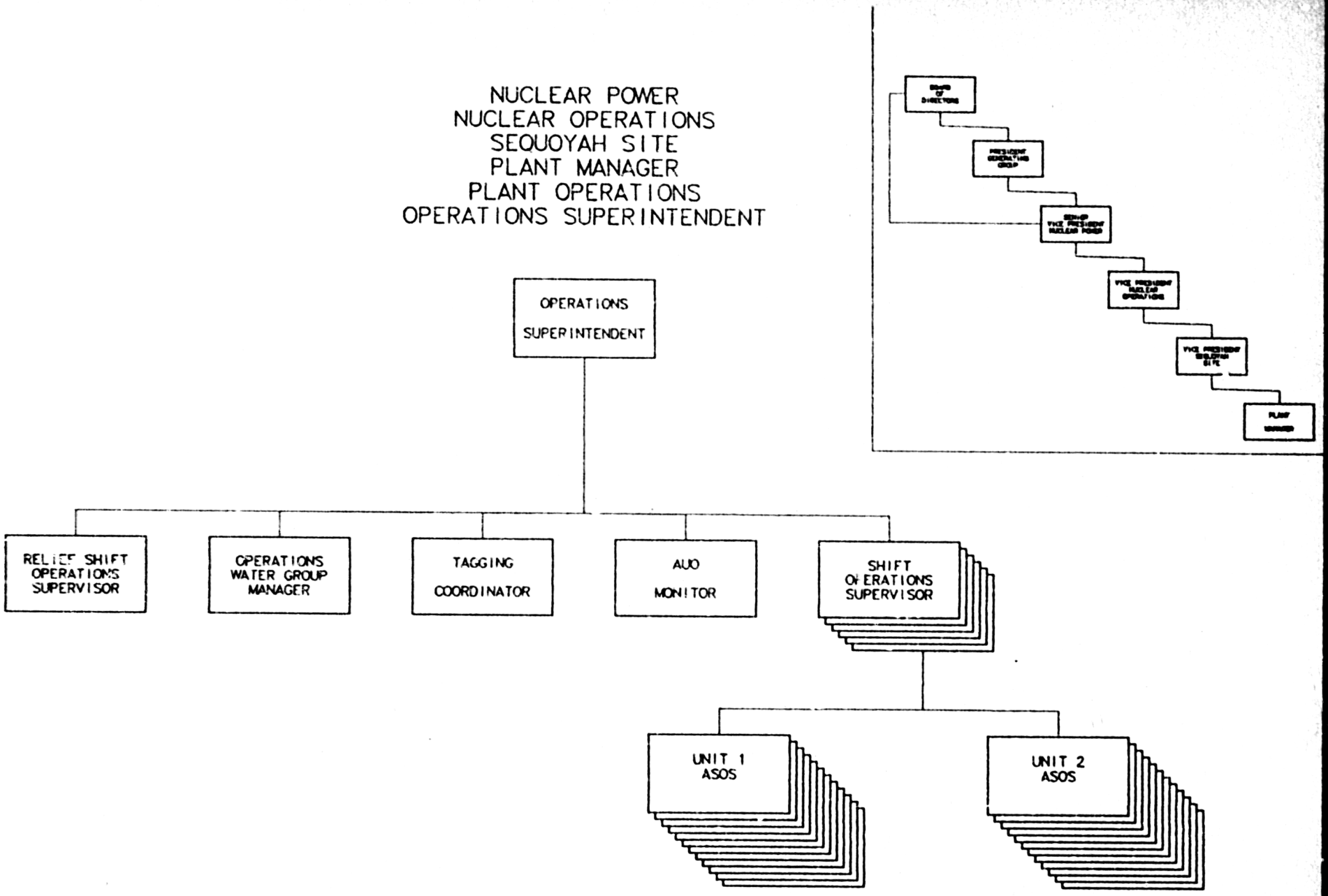
PROGRAM MANAGER

- PERFORMANCE MONITORING
- PROGRAM DIRECTION
- TRAINING OVERSIGHT

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

TAG-FIG36

FIGURE 3-6



TAG-FIG37

FIGURE 3-7

4.1 Vice President, Bellefonte Site (BLN)

The Vice President, BLN, reports to the Vice President of Nuclear Projects and has overall responsibility for construction completion, startup, operation, and site management. The Vice President, BLN, has overall responsibility for the quality of the plant and is the principal interface with the NRC and works with the Vice President, Technical Support on BLN regulatory policies and issues.

See Figure 4-2 for BLN, Site organization chart.

4.1.1 Manager, Nuclear Assurance & Licensing (NA&L)

The Manager, NA&L reports to the General Manager, Nuclear Assurance and is responsible for maintaining a site wide quality assurance organization to perform audit, quality engineering, quality control, quality improvement, and QA assessment functions. The Manager, NA&L is involved in day-to-day plant quality related activities through participation in plant meetings, coordinating the BLN Corrective Action Program, review of relevant documentation, technical and routine surveillances, and maintaining an Inspection and Test organization to support ongoing work activities to determine the effectiveness of the Nuclear Quality Assurance Program.

The Manager, NA&L has authority for stopping work or further processing delivery or installation, and issuing formal stop work orders when warranted to control and/or prevent the use of nonconforming materials or continuance of activities adverse to quality. The Manager, NA&L performs supporting NA functions such as trending, root cause analysis, and interfacing on quality issues.

The Manager, NA&L has overall responsibility for BLN Licensing. The Manager, NA&L is responsible for providing information and interpretations concerning regulatory requirements. The Manager, NA&L coordinates activities associated with the preparation and conduct of NRC audits, inspections, and meetings, and ensures resolution of NRC requests or imposed regulatory changes. The Manager, NA&L ensures compliance with the FSAR and Plant Technical Specifications (when issued), and managing the Site Nuclear Experience Review Program.

The site licensing organization includes the Nuclear Experience Review (NER) Program, Compliance Licensing, and Regulatory Licensing. The Site Licensing Manager reports directly to the Manager, NA&L.

4.1.2 Completion Department Manager

The Completion Department Manager reports directly to the Vice President, BLN, and has overall responsibility for the management and implementation of programs and activities required to complete BLN as an operating facility. The Completion Department Manager has site design authority and is responsible for completion of engineering and design, Unit 1 and 2 construction and verification testing.

The Completion Department Manager is also responsible for all support functions assigned to the Completion Department including completion procedures, planning, cost control, training of personnel, support for the Manager, NA&L on licensing issues and interface with the Manager, NA&L on quality issues.

4.1.3 Site Engineering Manager

The Site Engineering Manager reports directly to the Vice President, BLN, and has the overall responsibility of providing technical support to site department associated with the protection and preservation of plant equipment and facilities. This is accomplished by providing day-to-day technical support to the appropriate site departments. The Site Engineering Manager is also responsible for actively monitoring and participating in Completion Department design engineering activities and decision making processes that influence approved workscope, plant design basis development, and design verification. The Site Engineering Manager has final approval authority for the BLN design.

4.1.4 Manager of Projects

The Manager of Projects reports directly to the Vice President of Projects and is matrixed to the Vice President, BLN. The Manager of Projects implements project management concepts for plant completion and modification. The Manager of Projects has responsibility for site wide hardware/software nuclear power projects which may cross organizational boundaries. He assures that these projects are initiated, conducted, completed, and closed on schedule and within budget.

4.1.5 Plant Manager

The Plant Manager reports directly to the Vice President, BLN. The Plant Manager's organization is comprised of four major groups including, Maintenance, Operations, and Radiological Controls. The manager of each group reports to the Plant Manager. The Plant Manager ensures that qualified personnel, procedures, programs, and management direction are available to maintain the plant preservation and layup program to support activities of the Completion Department and all perform activities for plant startup and operation turned over from the Completion Department.

4.1.6 Site Services Manager

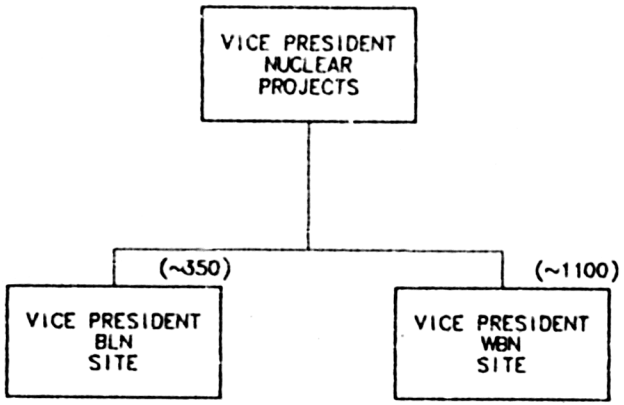
The Site Services Manager reports directly to the Vice President, BLN, and has overall responsibility for the management and oversight of staff administrative and support functions. The Site Services Manager has five principal reports and accomplishes functional responsibilities by providing direction to the manager of each of the following groups:

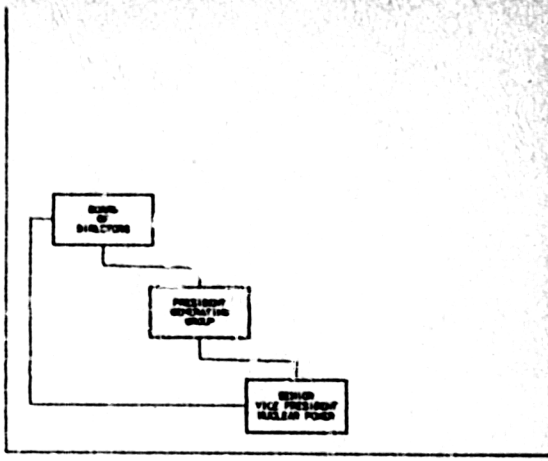
Management Services (MS)
Materials Management/Procurement
Industrial Safety & Fire Protection
Security
Information Services

4.1.7 Site Controller

The Site Controller reports directly to the Vice President, BLN and directs and manages the Project Control (Integrated Planning), Accounting, Budgeting, and Business Operations for the site. He also provides day to day direction and management to the Contract Administration function, matrixed from the Nuclear Power Corporate Contracts and Procurement group. He ensures total integration of accounting practices, budgets, forecasts, and variance analysis with the site integrated schedules, long range planning, manhour/manpower estimates, and performance trends. Organizations served and reviewed include site Vice President's staff, Plant organizations, Completion, Engineering, Assurance and Licensing, and so forth, with emphasis on fiscal control, work measurement, schedule assessment, senior management analysis, and recommended actions to the Vice President, BLN.

NUCLEAR POWER
NUCLEAR PROJECTS

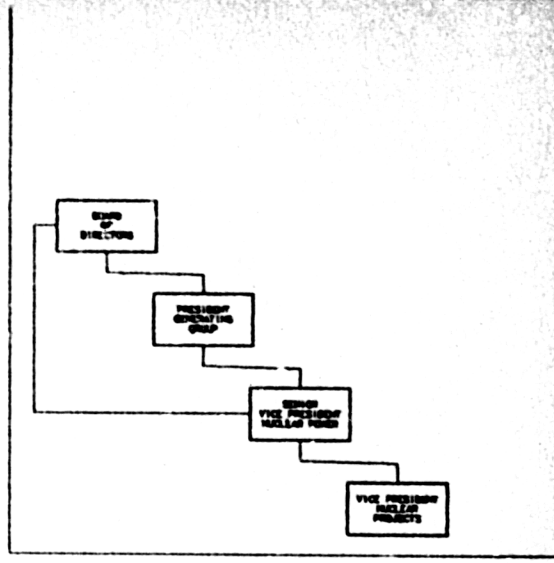




TAG-FIG41

FIGURE 4-1

NUCLEAR POWER
NUCLEAR OPERATIONS
BELLEFONTE SITE



GENERAL MANAGER NUCLEAR ASSURANCE

VICE PRESIDENT PROJECT MANAGEMENT

VICE PRESIDENT BELLEFONTE SITE

MANAGER, NUCLEAR EMPLOYEE RELATIONS & DEVELOPMENT

HUMAN RESOURCES MANAGER

NUCLEAR ASSURANCE & LICENSING MANAGER

- QA AUDITS
- QC INSPECTIONS
- ASSESSING
- QUALITY ENGINEERING REVIEWS
- ASSESSING OF DESIGN PROCESS
- NUCLEAR EXPERIENCE REVIEW
- CAQ PROGRAMS
- NRC LICENSES
- NRC COMPLIANCE
- NRC DOCUMENTATION
- COMMITMENT TRACKING

MANAGER OF PROJECTS

SITE ENGINEERING MANAGER

SITE SERVICES MANAGER

- FACILITIES
- SECURITY
- INDUSTRIAL SAFETY
- MATERIAL MANAGEMENT
- PROCEDURES
- HEALTH
- DOCUMENT CONTROL
- INFORMATION SERVICES

COMPLETION MANAGER

- PLANNING
- CONSTRUCTION
- STARTUP TESTING
- ENGINEERING
- ENGINEERING SUPPORT
- TECHNICAL ADMINISTRATION
- TECHNICAL PROGRAMS

PLANT MANAGER

- MAINTENANCE
- OPERATIONS
- TECHNICAL SUPPORT
- RADIOLOGICAL CONTROL
- PLANT LAYUP
- TRAINING

SITE CONTROLLER

- BUDGET
- ACCOUNTING
- BUSINESS REPORTING
- PROJECT CONTROL

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

TAG-FIG42

FIGURE 4-2

4.2 Vice President, Watts Bar Site (WBN)

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

The Vice President, WBN, 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
Site Operations Vice President
Site Employee Relations & Development Manager

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

See Figure 4-3 for the Vice President, WBN, Site organization chart.

4.2.1 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 & Modifications is responsible for establishment of design and configuration controls, establishment and maintenance of engineering standards and processes, and monitoring oversight of engineering activities of the sites.

4.2.2 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.

4.2.3 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;

e. Materials and Procurement; and

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

4.2.4 Site Licensing Manager

The Site Licensing Manager is responsible for the following activities:

a. Serving as the principal onsite 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 generic issues and commitment tracking programs;

e. Serves as interface for QA/NMRG/ANI/NML audits; and

f. Responsible for INPO coordination.

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.

4.2.5 Site Operations Vice President

The Site Operations Vice President, reports to the Site Vice President, WBN. The Site Operations Vice President, is responsible to complete, start and turn over an operational unit. The Site Operations Vice President directs all operations functions to ensure that the Watts Bar organization is cost effective, efficient, and consistent with the goals and objectives of Nuclear Power.

The Site Operations Vice President, has two principle direct reports which are the Watts Bar Plant Manager and the Startup and Test Manager.

See Figure 4-4 for the Site Operations organization chart.

A. 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.

1. 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.

2. 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.

3. Plant Operations Manager

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

The Operations Superintendent, who reports to the Plant 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.

4. Radiological and Chemistry Control

The Radiological and Chemistry Control Manager is responsible for chemistry and 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 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.

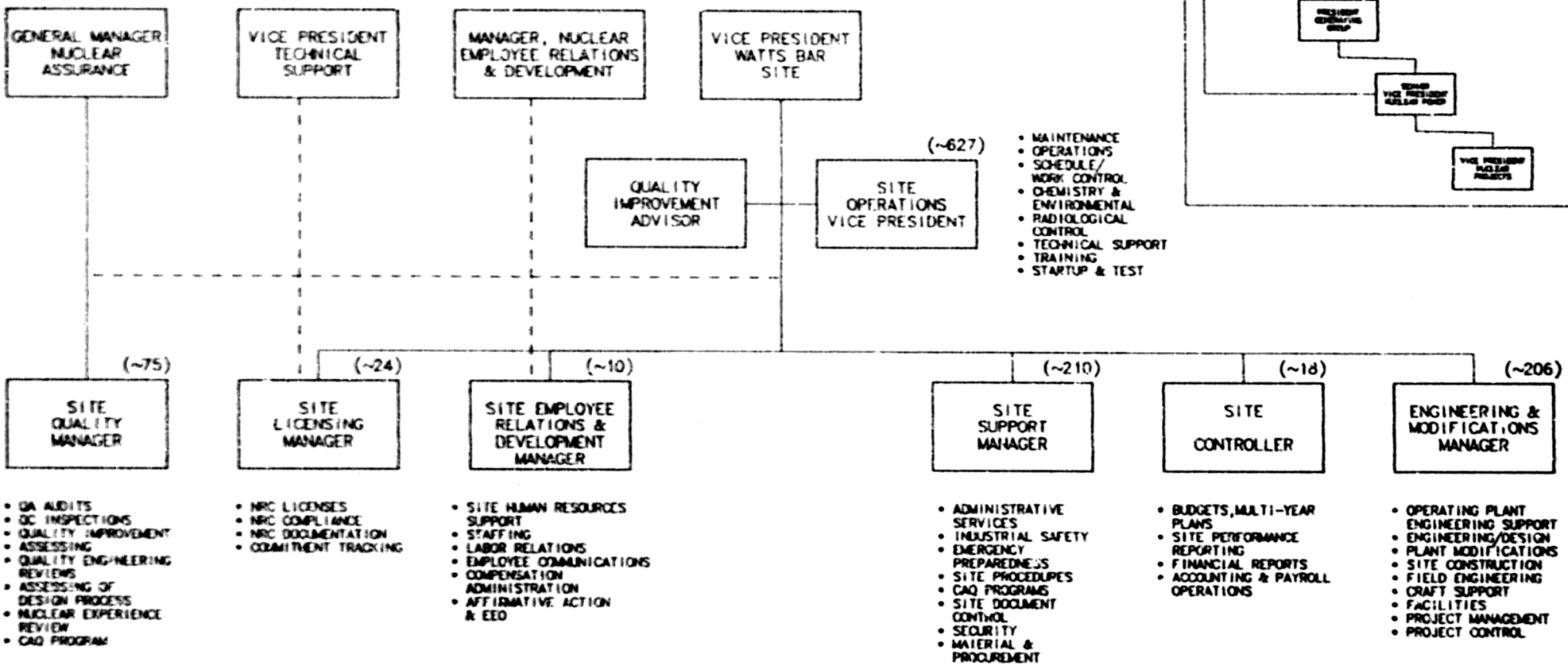
5. Planning, Scheduling, and Outage

The Planning, Scheduling and Outage 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.

B. Startup and Test

The Startup and Test Manager is responsible for activities necessary to achieve system completion, preoperational testing, and operations turnover for those systems necessary to ensure the adequate completion of WBN in support of licensing and plant startup.

NUCLEAR POWER
NUCLEAR PROJECTS
WATTS BAR SITE

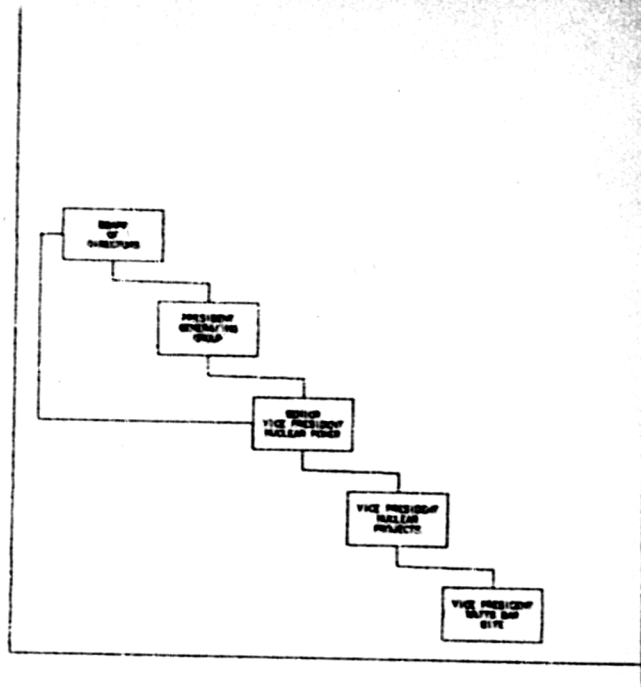


- - - INDICATES MATRIXED ORGANIZATION AND SHOWS DAY-TO-DAY FUNCTIONAL SUPERVISION

TAG-FIG43

FIGURE 4-3

NUCLEAR POWER
NUCLEAR PROJECTS
SITE OPERATIONS



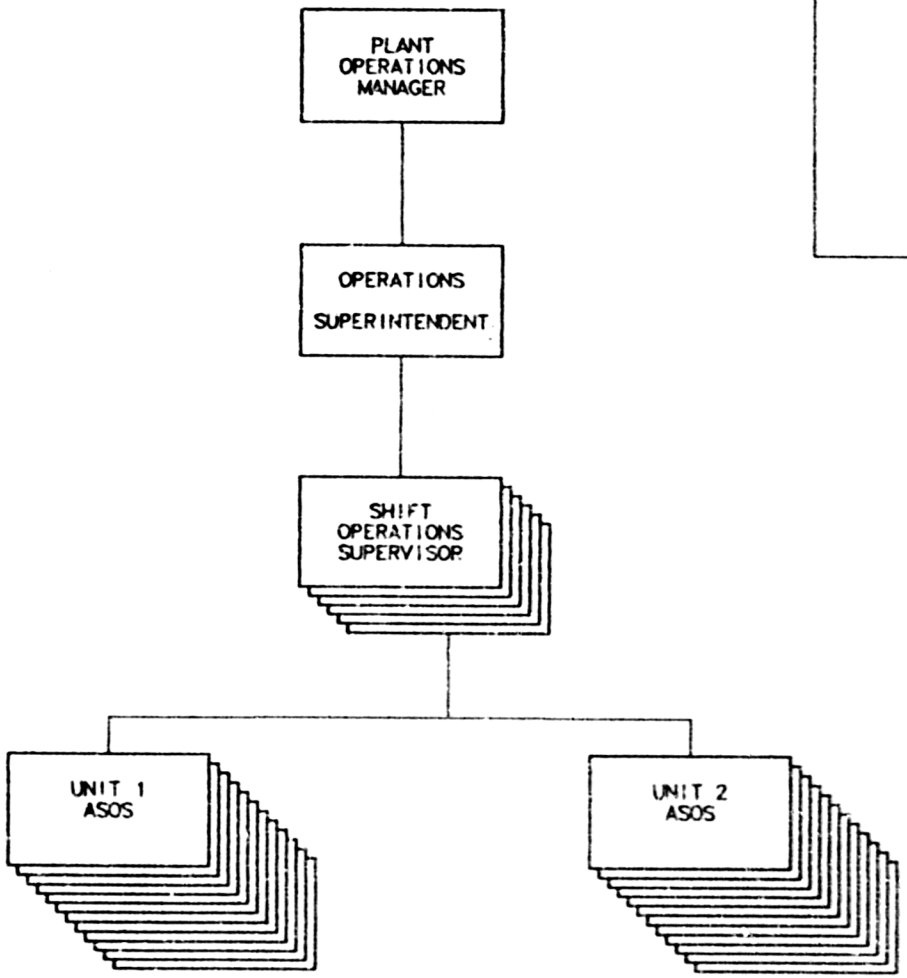
SITE OPERATIONS VICE PRESIDENT

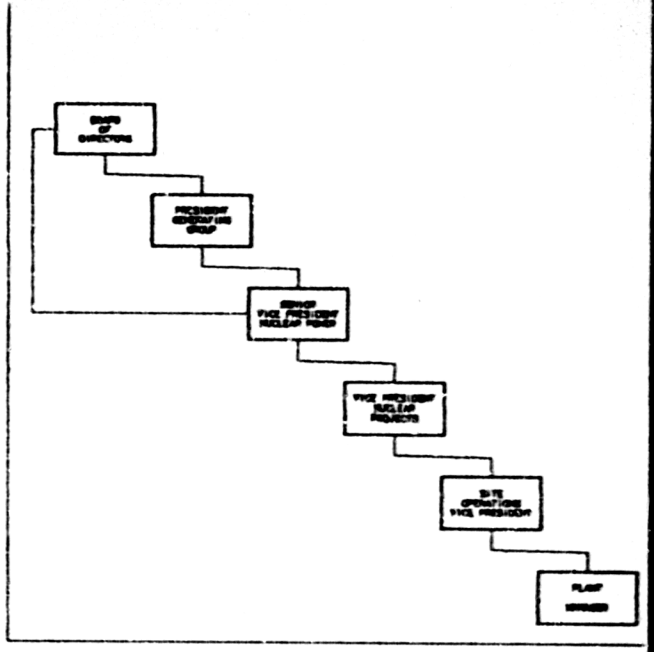
- STARTUP & TEST MANAGER (~7)
  - SYSTEMS COMPLETION
  - PREOPERATIONAL TESTING
  - SYSTEM TURNOVER
- WATTS BAR PLANT MANAGER (~620)
  - NUCLEAR TRAINING MANAGER
    - TRAINING MANAGER (~43)
      - GENERAL EMPLOYEE TRAINING (GET)
      - ACCREDATED OPERATIONS TRAINING
      - ACCREDATED RADION & CHEMISTRY TRAINING
      - ACCREDATED MAINTENANCE & ENGINEERING TRAINING
  - PLANT OPERATIONS MANAGER (~169)
    - PLANT OPERATIONS
    - WATER & WASTE PROCESSING
    - FIRE BRIGADE
    - FIRE TRAINING
    - OPERATIONS TRAINING INTERFACE
  - MAINTENANCE MANAGER (~250)
    - PREVENTIVE AND CORRECTIVE MAINTENANCE OF PLANT EQUIPMENT
    - SURVEILLANCE TESTING
    - TOOL ROOM
    - PLANT MAINTENANCE
    - COMMUNICATIONS SYSTEM MAINTENANCE
    - PREDICTIVE MAINTENANCE
  - TECHNICAL SUPPORT MANAGER (~64)
    - SYSTEMS ENGINEERING
    - FUEL MANAGEMENT
    - SNM ACCOUNTABILITY
    - CORE MONITORING
    - PLANT REPORTING
  - RADIOLOGICAL & CHEMISTRY CONTROL MANAGER (~85)
    - RAD CONTROL MANAGEMENT
    - ALARA
    - RADIATION PROCEDURES, PROTECTION, TRAINING & MONITORING
    - PERSONNEL EXPOSURE RECORDS
    - RADIATION & CONTAMINATION LEVEL RECORDS
    - RADIOLOGICAL WASTE & DECONTAMINATION MANAGEMENT
    - CHEMISTRY
    - RADIOCHEMISTRY
    - ENVIRONMENTAL COMPLIANCE
  - PLANNING, SCHEDULING & OUTAGE MANAGER (~43)
    - WORK CONTROL INCLUDING OVERALL WORK SCHEDULES; OUTAGE PLANNING, COORDINATION, AND PERIODIC TEST PROGRAM

TAG-FIG44

FIGURE 4-4

NUCLEAR POWER
NUCLEAR PROJECTS
BAR SITE OPERATIONS
PLANT MANAGER
PLANT OPERATIONS





TAG-FIG45A

FIGURE 4-5