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August 31, 2011

10 CFR 50.4  
10 CFR 50.71(e)

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Browns Ferry Nuclear Plant, Units 1, 2, and 3  
Facility Operating License Nos. DPR-33, DPR-52, and DPR-68  
NRC Docket Nos. 50-259, 50-260, and 50-296

Sequoyah Nuclear Plant, Units 1 and 2  
Facility Operating License Nos. DPR-77 and DPR-79  
NRC Docket Nos. 50-327 and 50-328

Watts Bar Nuclear Plant, Unit 1  
Facility Operating License No. NPF-90  
NRC Docket No. 50-390

Watts Bar Nuclear Plant, Unit 2  
NRC Docket No. 50-391

**Subject:        Organization Topical Report, TVA-NPOD89-A**

**Reference:**    Tennessee Valley Authority letter to NRC, "TVA Organization Topical Report, TVA-NPOD89-A," dated September 14, 2009

In accordance with 10 CFR 50.71, "Maintenance of records, making of reports," paragraph (e), enclosed is Revision 19 of Tennessee Valley Authority (TVA) Organization Topical Report (TVA-NPOD89-A). TVA's Organization Topical Report provides organizational descriptions for the TVA Nuclear Power Group, including Browns Ferry Nuclear Plant, Sequoyah Nuclear Plant, Watts Bar Nuclear Plant, and the TVA Nuclear Generation Development and Construction organization. This report is referenced in the Updated Final Safety Analysis Reports (UFSARs) for each of

2004

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TVA's operating nuclear power plants and must comply with the update submittal frequency requirements for the UFSARs. The reference letter provided the most recent update to the TVA Organization Topical Report on September 14, 2009. Accordingly, the due date for this report is September 14, 2011.

No new regulatory commitments are made by this letter. If you have any questions regarding this submittal, please contact Terry Cribbe at (423) 751-3850.

Respectfully,



R. M. Krich

Enclosure: Organization Topical Report, TVA-NPOD89-A, Revision 19

cc (Enclosure):

NRC Regional Administrator - Region II  
NRC Senior Resident Inspector - Browns Ferry Nuclear Plant  
NRC Senior Resident Inspector - Sequoyah Nuclear Plant  
NRC Senior Resident Inspectors - Watts Bar Nuclear Plant

**Enclosure**

**Organization Topical Report  
TVA-NPOD89-A, Revision 19**

**TENNESSEE VALLEY AUTHORITY**  
**ORGANIZATION TOPICAL REPORT, TVA-NPOD89-A**  
**(GENERAL REVISION)**  
**REVISION 19**

**AUGUST 2011**

## ORGANIZATION DESCRIPTION

### LIST OF REVISIONS

|                   |                   |
|-------------------|-------------------|
| REVISION 0 .....  | June 1, 1989      |
| REVISION 1 .....  | August 13, 1990   |
| REVISION 2 .....  | April 18, 1991    |
| REVISION 3 .....  | April 17, 1992    |
| REVISION 4 .....  | December 27, 1993 |
| REVISION 5 .....  | December 16, 1994 |
| REVISION 6 .....  | June 29, 1995     |
| REVISION 7 .....  | June 27, 1997     |
| REVISION 8 .....  | August 25, 1999   |
| REVISION 9 .....  | August 25, 2000   |
| REVISION 10 ..... | August 24, 2001   |
| REVISION 11 ..... | August 26, 2002   |
| REVISION 12 ..... | August 22, 2003   |
| REVISION 13 ..... | August 31, 2004   |
| REVISION 14 ..... | August 30, 2005   |
| REVISION 15 ..... | June 22, 2006     |
| REVISION 16 ..... | August 30, 2007   |
| REVISION 17 ..... | August 29, 2008   |
| REVISION 18 ..... | August 31, 2009   |
| REVISION 19 ..... | August 31, 2011   |

**TENNESSEE VALLEY AUTHORITY**  
**ORGANIZATION TOPICAL REPORT, TVA-NPOD89-A**  
**(GENERAL REVISION)**  
**REVISION 19**

**AUGUST 2011**

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| REVISION 18 ..... | August 31, 2009   |
| REVISION 19 ..... | August 31, 2011   |

# **TVA NUCLEAR POWER GROUP ORGANIZATION DESCRIPTION**

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## **Abstract**

This Topical Report (TVA-NPOD89-A) includes the organizational descriptions for the Nuclear Power Group (NPG) including Browns Ferry (BFN), Sequoyah (SQN), Watts Bar (WBN) Nuclear Plants, the Corporate Nuclear Power Group organization and TVA's Nuclear Generation Development and Construction (NGDC). This report contains the senior management, technical support and operating organization descriptions, and organization charts that meet the "content" guidance of Nuclear Regulatory Commission's (NRC's) Regulatory Guide 1.70, Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants - LWR Edition, Rev. 3 (November 1978).

Qualification 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 NPG Quality Assurance Plan (TVA-NQA-PLN89-A) and is not repeated herein.

The original purpose of the NPG Organization Description (TVA-NPOD89-A) was to establish a controlled, single-source document and a disciplined process for communicating organization structure and position descriptions to the NRC. TVA-NPOD89-A will be referenced in future revisions of our license applications including the Safety Analysis Reports, Technical Specifications, the Nuclear Quality Assurance Plan, and other documents that may refer to the NPG and NGDC organizations. This topical report is updated as necessary to reflect major organizational changes. Since this topical report encompasses multiple plants, subsequent updates to the Topical Report will be provided on a biennial basis to ensure that TVA meets the refuel cycle criterion of 10 CFR 50.71(e) for each unit at each site.

## **Introduction**

### **TVA Corporate Organization**

TVA is an agency of the federal government whose major policies, programs, and organization are determined by a part-time, nine member Board of Directors (BOD) structure pursuant to the TVA Governance Restructuring provisions of the Consolidated Appropriations Act, 2005. The BOD members are appointed by the President of the United States and confirmed by the Senate for five-year terms. The BOD selects a Chief Executive Officer (CEO) who also serves as President to manage TVA's day-to-day business. The BOD shapes the long-term business strategies, recommends major program initiatives, and guides TVA's day-to-day operations.

The CEO is responsible for managing all aspects of TVA, including power production, transmission, power trading, resource management programs, and economic development, as well as TVA's corporate functions. The CEO heads TVA's Executive Committee and chairs its Business Council.

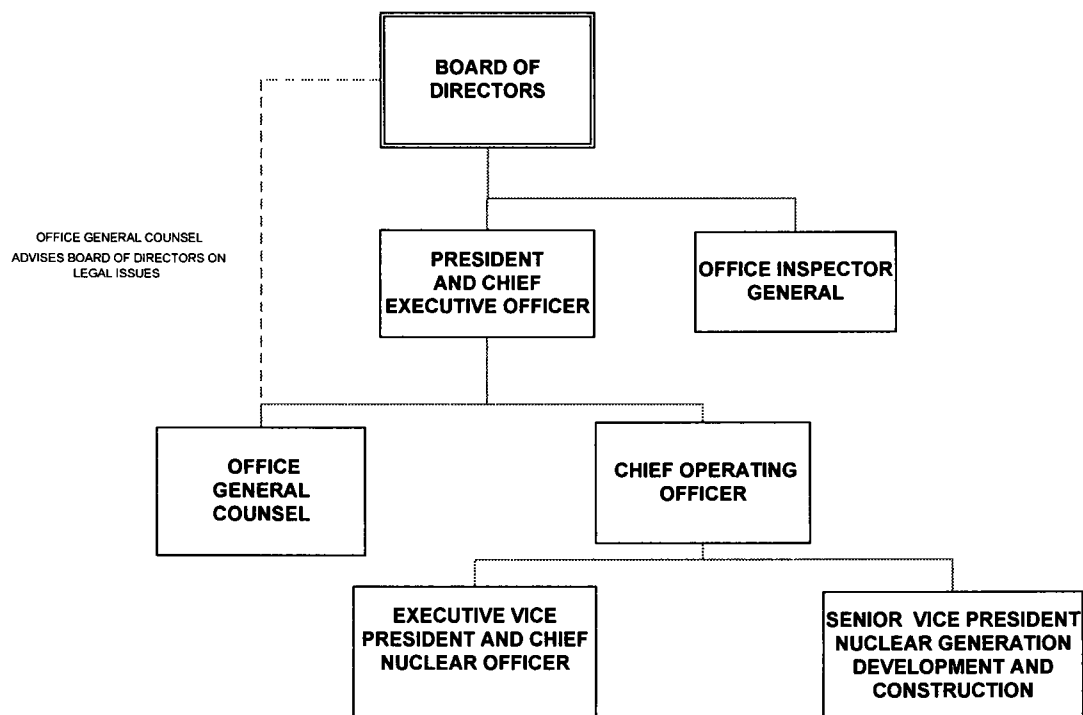
The Chief Operating Officer (COO) is responsible for pulling together all the operational elements of TVA with a clear focus on the operational excellence of the organization. This organization is faced with the challenges of meeting environmental pressures, growing power demand, and stakeholder expectations.

The Executive Vice President and Chief Nuclear Officer (CNO) is responsible for the overall safety, efficiency, and economy of TVA's Nuclear Power Program and the overall Nuclear Power Group (NPG) organization.

The Senior (Sr.) Vice President (VP) Nuclear Generation Development and Construction is accountable for the development and construction of additional nuclear generation assets and technologies to meet demands for safe, clean, reliable and low cost power.

The Corporate Organization leadership and reporting relationships are shown in Figure 1-0.

**CORPORATE ORGANIZATION  
FIGURE 1-0**



I. Chief Operating Officer (COO)

The COO has the primary responsibility for directing and managing the operations of all of TVA's generating plants, Power System Operations and the Commercial Operations and Fuels Group. This position directs, administers, and coordinates the activities of these organizations in accordance with the goals, vision, and values established by the CEO and the Board of Directors. The incumbent is accountable for the operational results of TVA that ensure achievement of goals and objectives as well as establishing operating short-term and long-term objectives, plans and policies subject to the approval of the CEO. The Organizations with Nuclear responsibilities are described below.

The Nuclear Power Group (NPG) is responsible for nuclear plant engineering and design, operation, quality assurance, and compliance with regulatory requirements. NPG plans and manages the Nuclear Program to meet the requirements of TVA's Power Program consistent with safety, environmental, quality, and economic objectives.

The general organization of NPG is shown in Figure 2-0.

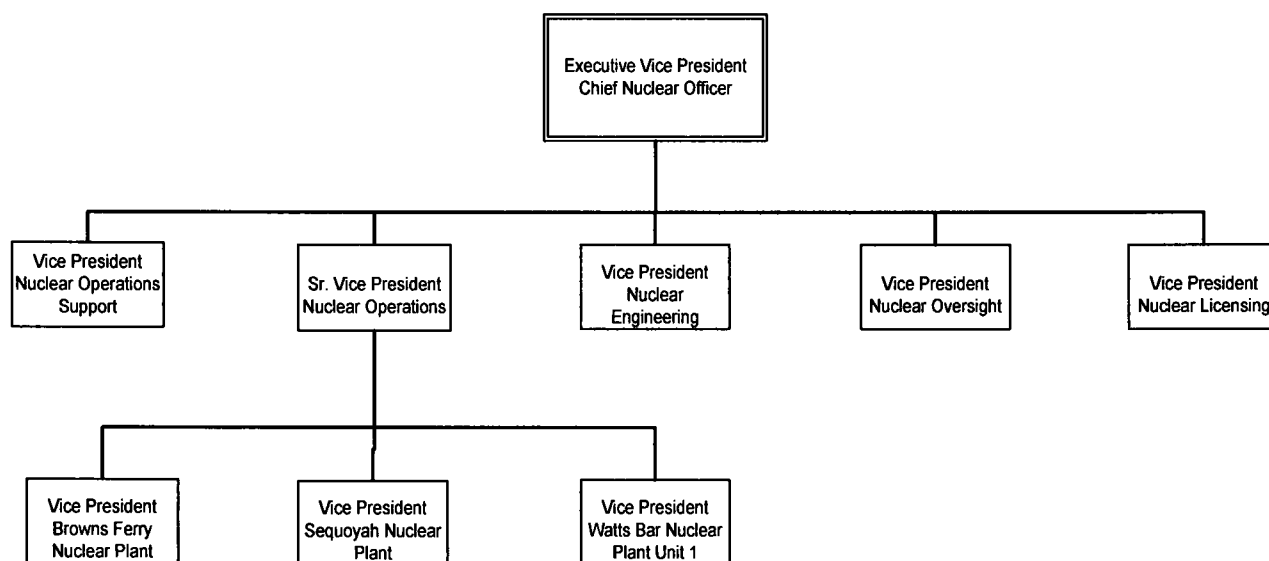
A. Executive Vice President and Chief Nuclear Officer (CNO)

The Executive Vice President and CNO 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 Executive Vice President and CNO has corporate responsibility for overall plant nuclear safety and shall take measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support in the plant so that continued nuclear safety is assured. The Executive Vice President and CNO reports directly to the Chief Operating Officer (COO). The COO reports directly to the Chief Executive Officer. The Executive Vice President and CNO is responsible for the overall safety, efficiency, and economy of nuclear operations. The Executive Vice President and CNO establishes management and operating policies and procedure's related to TVA's Nuclear Program and is responsible for personnel, planning, scheduling, licensing, engineering and design, construction, operation, quality assurance, training, maintenance, and technical and administrative matters related to these programs. The Executive Vice President and CNO coordinates activities and functions of the NPG with other TVA organizations in order to carry out TVA's corporate policy and to meet corporate goals and objectives. This position is responsible for all aspects of TVA's interface and relations with the NRC and other entities with jurisdiction over or interest in TVA's Nuclear Program. Other responsibilities include: development and implementation of an effective radiological Emergency Preparedness Program; directing shutdown of nuclear facilities when deemed appropriate; and development of long-range, strategic plans for all NPG programs, activities, and facilities. Quality

Assurance reports directly to the Vice President, Nuclear Oversight, but has direct access to the Executive Vice President and CNO. This provides independence and freedom to effectively ensure conformance to Quality Assurance Program requirements. The Senior Vice President, Nuclear Generation Development and Construction works with the Executive Vice President and CNO to ensure that future nuclear generation is coordinated with the existing fleet.

The Executive Vice President and CNO's direct reports are provided in Figure 2-0. These functions are described in more detail in subsequent sections of this Topical Report.

**CHIEF NUCLEAR OFFICER  
FIGURE 2-0**



A. Executive Vice President and Chief Nuclear Officer (CNO) (continued)

1.0 Vice President Nuclear Operations Support

This position provides technical support for the NPG. Responsibilities include Security Operations, Emergency Preparedness Services, Nuclear Outages & Scheduling, Functional Area Oversight and Governance. The VP Nuclear Operations Support advises the CNO and other corporate and site management on a wide range of Nuclear Support issues.

2.0 Vice President Nuclear Engineering

This position is responsible for establishing and directing engineering functions within the NPG. This includes Corporate Design Engineering, Equipment Reliability & Components Engineering, Engineering Programs, Reactor Engineering & Fuels, Corporate System Engineering, and Probabilistic Risk assessment. Responsibilities include governance and oversight of Site Engineering functions and policy compliance for NPG's fleet in regard to engineering functions. In addition, this position advises NPG executives on technical issues affecting the sites and provides direction to the Site Engineering Directors.

3.0 Vice President Nuclear Oversight

The Vice President, Nuclear Oversight reports directly to the CNO and is responsible for directing and managing the Nuclear Power Group Oversight organization, including Quality Assurance, Performance Analysis and Assessment, Corrective Action Program, Performance Improvement and Corporate Nuclear Training. The responsibility for Quality Assurance includes oversight to ensure implementation of NPG's QA Programs for evaluating program effectiveness for design, construction, safety and reliability, and operation of TVA's nuclear plants. This includes review of the Nuclear Quality Assurance Plan and Quality Assurance internal procedures. Quality Assurance has an indirect reporting structure to the CNO to provide independence and freedom to effectively ensure conformance to Quality Assurance Program requirements.

4.0 Vice President Nuclear Licensing

This position provides oversight and direction of the NPG Licensing functions in support of the operations of TVA's licensed nuclear plants. This position is responsible for the development of regulatory vision and strategy for regulatory issues for both Corporate and Sites and providing policy recommendations. This position provides governance and oversight of the site licensing organizations.



## 5.0 Senior Vice President Nuclear Operations

This position reports directly to the CNO and provides oversight of the NPG operating nuclear plants. The Senior Vice President Nuclear Operations direct reports are the Nuclear Plant Site Vice Presidents.

### 5.1 Site Vice President (Typical for the operating nuclear plants)

This position is responsible and accountable for activities at the site including operations, modifications, maintenance, support, training, and engineering services. The Site Vice President's direct reports and functional reporting relationships are provided in Figure 2-1.

#### 5.1.1 Director Site Engineering

This position is responsible for management and execution of site projects to provide overall management of the Engineering Design, Systems Engineering, Engineering Support, Technical Support, and Components Test and Inspection functions at the site. This function specifically includes managing activities necessary for capital work in support of the operating units and refueling outages.

##### 5.1.1.1 Manager System Engineering

Responsible for integrated management and execution of site projects to provide overall management of the engineering functions at the site, including both outage and on-line support. This responsibility specifically includes managing activities necessary for system health and capital work in support of the operating unit(s), refueling outages, and to recover units from unplanned outages safely, within budget, on schedule, in accordance with applicable requirements.

##### 5.1.1.2 Manager Design Engineering

Responsible for integrated management and execution of site projects to provide overall management of the engineering functions at the site, including both outage and on-line support. This responsibility specifically includes managing activities necessary for capital work in support of the operating unit(s), refueling outages, and to recover units from unplanned outages safely, within budget, on schedule, in accordance with applicable requirements.

##### 5.1.1.3 Manager Reactor Engineering

Plans and directs the Reactor Engineering section functions to ensure the reliable and efficient performance

of assigned plant equipment in accordance with applicable requirements.

5.1.1.4 Manager Component Engineering

Manage the Component Engineering functions to ensure the reliable and efficient performance of assigned plant equipment and components, in accordance with applicable requirements.

5.1.2. Director Site Training

This position directs the planning, development, implementation, and evaluation of Training Programs to ensure sufficient qualified personnel to operate, maintain, and modify the nuclear power plant.

5.1.3 Director Project Management

This position is responsible for cost engineering functions including estimating, forecasting, trending/scope control, data analysis, and reporting. Other responsibilities include ensuring technical and programmatic cost requirements of the site organizations and for planning and scheduling of major modifications and projects.

5.1.4 Director Safety and Licensing

This position is responsible for the Site Performance Improvement, Emergency Planning, and Site Licensing functions.

5.1.5 Manager Site Quality Assurance

This position provides oversight of quality activities associated with the operation of the plant. Responsibilities are described in detail in TVA's Nuclear Quality Assurance Plan (TVA-NQA-PLN89-A). This position reports to the General Manager, Quality Assurance (Corporate) and has a reporting relationship (dotted line) to the Site Vice President.

5.1.6 Plant Manager (General Manager at Browns Ferry)

This position is responsible for ensuring that plant operations and support activities are conducted in accordance with applicable requirements. Responsible for overall plant safe operation and has control over those resources necessary for safe operation and maintenance of the plant. This position's direct reports and areas of administrative responsibilities are provided in Figure 2-2.

5.1.6.1 Manager Maintenance

This position is responsible for planning, directing, and managing the plant's Maintenance Program to ensure

that equipment and systems are maintained in accordance with operability and reliability engineering practices and requirements.

**5.1.6.1.1 Superintendent Instrumentation and Controls**

Manage the activities of the Instrumentation and Controls Maintenance business unit. Provides long-range business unit planning that meets site financial objectives and technical requirements. Management of the Corrective, Preventive, and Outage Maintenance Programs for all plant instrumentation equipment to ensure that equipment functions properly and meet desired performance objectives.

**5.1.6.1.2 Superintendent Electrical**

Manage the activities of the Electrical Maintenance business unit. Provides long-range business unit planning that meets site financial objectives and technical requirements. Management of the Corrective, Preventive, and Outage Maintenance Programs for all plant electrical equipment to ensure that equipment functions properly and meet desired performance objectives.

**5.1.6.1.3 Superintendent Mechanical**

Manage the activities of the Mechanical Maintenance business unit. Provides long-range business unit planning that meets site financial objectives and technical requirements. Management of the Corrective, Preventive, and Outage Maintenance Programs for all plant mechanical equipment to ensure that equipment functions properly and meet desired performance objectives.

**5.1.6.2 Manager Radiation Protection**

This position guides programs and activities at the plant ensuring that all operations, maintenance, modifications and engineering activities are conducted in a radiological safe manner and protect plant personnel, systems and equipment.

**5.1.6.3 Manager Chemistry and Environmental**

This position guides programs and activities at the plant ensuring that all operations, maintenance, modifications, and engineering activities that potentially impact plant chemistry/environmental are conducted in a manner consistent with applicable requirements.

5.1.6.4 Manager Work Control

This position provides overall responsibility for planning, coordination, scheduling and monitoring of all on line and outage work. Responsible for establishing work priorities and coordinating shift turnover; managing the plant scheduling processes; and ensuring efficient and effective management of the work control function.

5.1.6.5 Manager Operations

This position provides responsibility for planning, organizing, and setting policy, and support activities. These activities include operational strategies for generation, water and waste usage, approval authority for system enhancements, and prioritization of maintenance activities.

5.1.6.5.1 Superintendent Operations

This position is responsible for plant operations. The superintendent, through the Shift Manager, manages the day-to-day operation of the facility, refueling operations, start-up, operational testing, water and waste processing, and plant operations. The shift crew for an operating unit normally consists of the Shift Manager, Unit Supervisor, Nuclear Unit Operators, and Assistant Unit Operators.

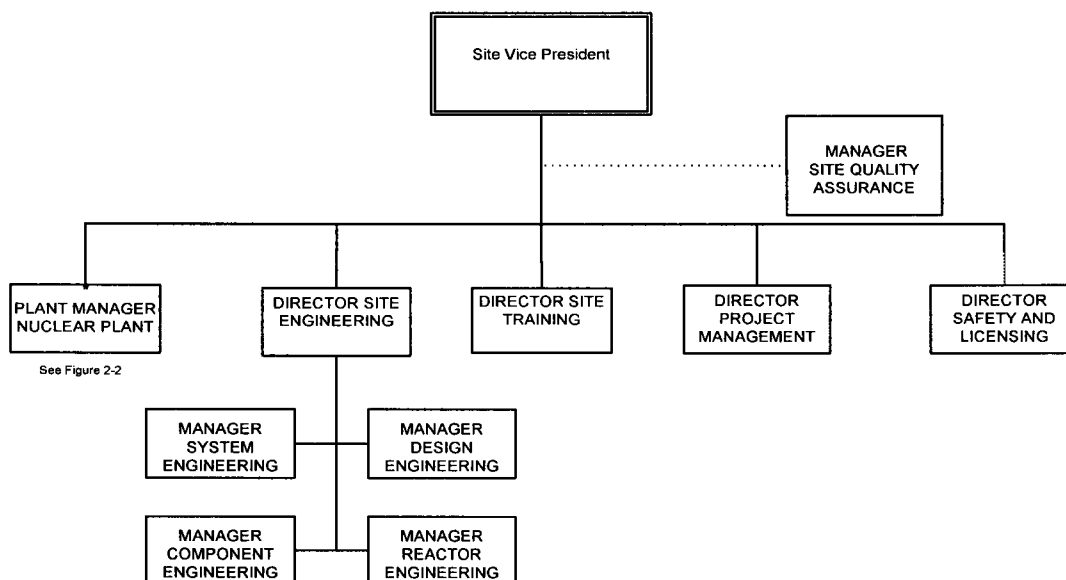
5.1.6.5.2 Superintendent Operations Support

This position is responsible for budget preparation, training oversight, performance monitoring, the Fire Protection Program and assists the Manager, Operations, in overall program direction for operations.

5.1.6.5.3 Superintendent Operations Outage Support

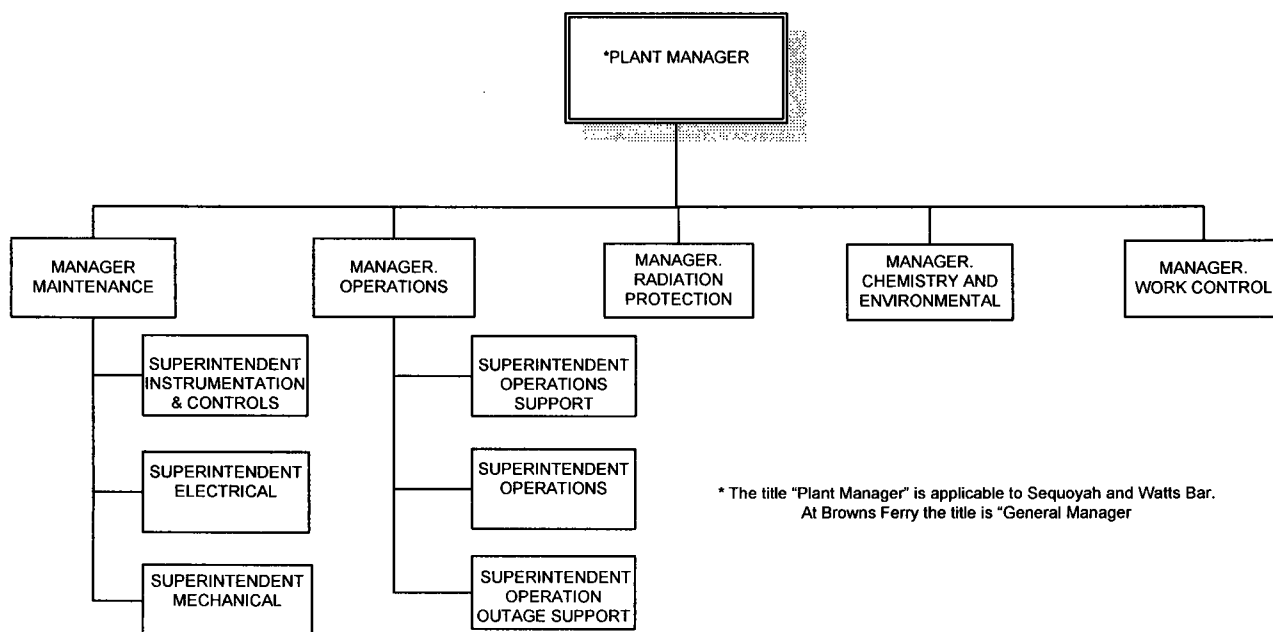
This position is responsible for all operations outage execution and preparation.

**Site Vice President**  
**Typical for Browns Ferry, Sequoyah, and Watts Bar Nuclear Plants**  
**Figure 2-1**



\* The title "Plant Manager" is applicable to Sequoyah and Watts Bar. At Browns Ferry, the title for this position is "General Manager"

**Plant Manager  
Figure 2-2**



**B. Senior Vice President Nuclear Generation Development and Construction (NGDC)**

This position is accountable for the development and construction of additional nuclear generation assets and technologies to meet demand for safe, clean, reliable and low cost power. Responsibilities also include major projects supporting NPG facilities (e.g. steam generator replacement, dry cask storage, etc.). This position's direct reports and administrative areas of responsibility are provided in Figure 3-0.

**1.0 Vice President Nuclear Generation Development**

This position provides oversight and directs the Nuclear Generation Development organization which is responsible for the development of new nuclear generation. Responsibilities include: developing and communicating strategies and plans for how TVA's nuclear related assets can best be used to meet future needs, managing the Tritium Production Program, advising executives on new nuclear generation assets and ensuring all managed activities are conducted in accordance with appropriate TVA policies, procedures and external regulations.

**2.0 General Manager Quality Assurance**

This position has direct access to the Senior Vice President, Nuclear Generation Development and Construction to provide for the independence and organizational freedom to effectively ensure conformance with the TVA Nuclear Quality Assurance Plan (TVA-NQA-PLN89-A). Direct reports include the Manager Quality Assurance Watts Bar Unit 2 and Manager Quality Assurance Bellefonte.

**2.1 Manager Quality Assurance Watts Bar Unit 2**

This position is a direct report to the NGDC General Manager Quality Assurance. This position provides oversight of quality activities associated with the conduct of Watts Bar Unit 2 project activities to oversee and ensure that we comply with NQAP Program. This position has direct access to the Senior Vice President of Nuclear Generation Development and Construction to allow for the independence and organizational freedom to execute the TVA NQAP to ensure nuclear safety and quality.

**2.2 Manager Quality Assurance Bellefonte**

This position is a direct report to the NGDC General Manager Quality Assurance. This position provides oversight of quality activities associated with the conduct of Bellefonte project activities to oversee and ensure that we comply with Nuclear Quality Assurance Program (NQAP). This position has direct access to the Senior Vice President of Nuclear Generation Development and Construction to allow for the independence and organizational freedom to execute the TVA NQAP to ensure nuclear safety and quality.

2.3 Manager Quality Assurance Corporate

This position manages the development, review, and maintenance of the quality assurance programs to ensure compliance with regulations, commitments, and policies. These include the internal audit and assessment, training and trending/analysis programs. This position manages the Quality Assurance oversight of the adequacy of the technical requirements, organizational performance and overall implementation of the Quality Assurance/Quality Control programs related to the corporate and site construction organizations.

3.0 General Manager Training and Performance Improvement

This position provides corporate governance and oversight of the planning, development, implementation, and evaluation of training programs to ensure sufficient qualified personnel to engineer and construct new nuclear generation assets.

4.0 General Manager Project Management

This position is responsible for directing management of major NGDC projects, including steam generator replacements, Dry Cask Storage Program, life extensions and ensuring that managed activities are conducted in accordance with appropriate regulations and TVA policies, programs, and procedures, and federal, state and local regulations. Additionally, this position provides governance and oversight of training programs and certifications.

5.0 General Manager Bellefonte Project

This position is responsible for directing project management functions on the Bellefonte Detailed Scoping, Estimating Project as well as site asset preservation functions. This includes determining the nature and extent of onsite and offsite support services required to support project operations. This also includes quality of work activities. This position's direct and indirect reports and administrative areas of responsibility are provided in Figure 3-1.

5.1 Senior Manager Site Projects

Responsible for implementation of NGDC Project Management policy and practices and overall coordination of major projects associated with the Bellefonte completion project. The scope includes Facilities Construction, Switchyard Upgrades, Site Security System, and other site projects.

5.2 Senior Manager Construction Plant Manager

Bellefonte Construction Plant Manager will manage the operations, facilities & maintenance contractor, pre-construction preventative and corrective maintenance programs and site security. Provide overall management of the maintenance functions, ensuring that managed



activities are conducted in accordance with appropriate regulations and TVA policies, programs, and procedures.

**5.3 Senior Manager Plant Projects**

Directs and/or coordinates work activities of multiple organizations within and external to TVA to develop integrated plans and meet cost and schedules. This position integrates multiple varied project support specialty areas including: finance, contracts, legal, customer contracts, negotiation, environmental reviews, engineering, and project controls. This position may also be responsible for managing system-wide, TVA Nuclear projects that implement physical changes or licenses to existing facilities or construction facilities, or programmatically resolve commitments to meet requirements.

**5.4 Senior Manager Construction**

The Senior Manager Construction is responsible for detailed planning and contracting to ensure major nuclear projects/contracts are ready for deployment once authorized. This position is responsible for preparing detailed execution plans, schedules, procedures, specifications for contract formation, cost estimates, resource allocation requirements, and contract bid evaluations; and negotiations for projects of all sizes including site specific modification projects to support Bellefonte Unit 1 completion.

**5.5 Senior Manager Engineering**

Responsible for management of engineering scope for the Bellefonte completion project including the establishment of the design basis, analytical methods, Engineering Design, Systems Engineering, Start up test, Technical Support, Components Test and Inspection functions on the project. This responsibility includes managing activities necessary for design basis reconciliation, design criteria development, analytical basis/start up programs developed and worked to closure, within budget, on schedule, in accordance with regulations and TVA policies and procedures. Also manages the project engineering activities, including management of multiple engineering (A/E) contractors, and coordinate engineering priorities with Licensing, Construction and Project Controls Managers to meet project objectives.

**5.5.1 Manager Electrical Engineering**

The Electrical Engineering Manager is responsible for management of electrical engineering scope for the Bellefonte completion project including the establishment of the design basis, analytical methods, Engineering Design, Systems Engineering, Start up test, Technical Support, Components Test and Inspection functions on the project. This

responsibility includes managing activities necessary for design basis reconciliation, design criteria development, analytical basis/start up programs developed and worked to closure, within budget, on schedule, in accordance regulations and TVA policies and procedures. Also manages the electrical project engineering activities, including management of multiple engineering (A/E) contractors, and coordinate engineering priorities with Licensing, Construction and Project Controls Managers to meet project objectives.

#### 5.5.2 Manager Mechanical Engineering

The Mechanical Engineering Manager is responsible for management of mechanical engineering scope for the Bellefonte completion project including the establishment of the design basis, analytical methods, Engineering Design, Systems Engineering, Start up test, Technical Support, Components Test and Inspection functions on the project. This responsibility includes managing activities necessary for design basis reconciliation, design criteria development, analytical basis/start up programs developed and worked to closure, within budget, on schedule, in accordance with regulations and TVA policies and procedures. Also manages the Mechanical project engineering activities, including management of multiple engineering (A/E) contractors, and coordinate engineering priorities with Licensing, Construction and Project Controls Managers to meet project objectives.

#### 5.5.3 Manager NSSS Engineering

The Nuclear Steam Supply System (NSSS) Engineering Manager is responsible for management of NSSS engineering scope for the Bellefonte completion project including the establishment of the design basis, analytical methods, Engineering Design, Systems Engineering, Start up test, Technical Support, Components Test and Inspection functions on the project. This responsibility includes managing activities necessary for design basis reconciliation, design criteria development, analytical basis/start up programs developed and worked to closure, within budget, on schedule, in accordance with regulations and TVA policies and procedures. This position manages the NSSS project engineering activities, including management of multiple engineering (A/E) contractors, and coordinate engineering priorities with Licensing, Construction and Project Controls Managers to meet project objectives.

#### 5.5.4 Manager I&C Engineering

The Instrumentation and Controls (I&C) Engineering Manager is responsible for management of I&C engineering scope for the Bellefonte completion project including the establishment of the design basis, analytical methods, Engineering Design, Systems Engineering, Start up test, Technical Support, Components Test and Inspection functions on the project. This responsibility includes managing activities necessary for design basis reconciliation, design criteria development, analytical basis/start up programs developed and worked to closure, within budget, on schedule, in accordance with regulations and TVA policies and procedures. This position manages the I&C project engineering activities, including management of multiple engineering (A/E) contractors, and coordinate engineering priorities with Licensing, Construction and Project Controls Managers to meet project objectives.

#### 6.0 Vice President Watts Bar Unit 2

This position provides management and oversight of activities to ensure safe and efficient completion of Watts Bar (WBN) Unit 2 including construction, operations, engineering, maintenance, cost scheduling, and pre-operational startup testing. This position, in conjunction with the WBN Unit 1 Site Vice President, is also responsible for thorough coordination and integration of activities with the operating unit in compliance with Applicable requirements. This position's direct reports and administrative areas of responsibility are provided in Figure 3-2.

##### 6.1 Senior Manager Operations

This position directs Unit 2 Operations, Unit 2 Fire Protection, and Unit 2 Work Control functions in order to ensure no impact to reliable and efficient generation to meet operations safety requirements; provide for sufficient qualified and licensed personnel to satisfy regulatory requirements; and design and implement process improvements to increase efficiency, effectiveness, and productivity while minimizing associated costs to improve competitiveness.

##### 6.2 Senior Manager Pre-Op Startup & Test

This position provides technical support and management of the Start-up and Test organization of the completion of Watts Bar Unit 2. Responsible for the development, coordination, and implementation of the pre-operational test program for the WBN Unit 2, per Regulatory Guide 1.68 "Initial Test Programs for Water-Cooled Nuclear Power Plants."

##### 6.3 Senior Manager Maintenance & Modification

This position directs the Construction, Maintenance and Modifications, planning, Field engineering and Turbine Generator activities in support of the WBN Unit 2

construction project ensuring the managed activities are conducted in accordance with all applicable TVA policies, programs, and procedures; plant Technical Specifications; and applicable regulations.

6.4 Senior Manager Construction

This position directs the Construction, Maintenance and Modifications, Planning, field engineering and Turbine Generator activities in support of the WBN Unit 2 construction project ensuring the managed activities are conducted in accordance with all applicable TVA policies, programs, and procedures; plant Technical Specifications; and regulations.

6.5 Senior Manager Construction Projects

This position is responsible for NGDC construction projects. It involves all aspects of planning, initiation, controlling, oversight and reporting. This position directs and/or coordinates work activities of multiple organizations within and external to TVA to develop integrated plans and meet cost and schedules.

6.6 Senior Manager Engineering

This position is responsible for management of engineering scope for the Watts Bar Unit 2 completion project including the establishment of the design basis, analytical methods, Engineering Design, Systems Engineering, Start up test, Technical Support, Components Test and Inspection functions on the project. This responsibility includes managing activities necessary for design basis reconciliation, design criteria development, analytical basis/start up programs developed and worked to closure, within budget, on schedule, in accordance with regulations and TVA policies and procedures. Also manages the project engineering activities, including management of multiple engineering (A/E) contractors, and coordinate engineering priorities with Licensing, Construction and Project Controls Managers to meet project objectives.

6.6.1 Manager Electrical/I&C Engineering

This position is responsible for management of electrical/I&C engineering scope for the Watts Bar Unit 2 completion project including the establishment of the design basis, analytical methods, Engineering Design, Systems Engineering, Start up test, Technical Support, Components Test and Inspection functions on the project. This responsibility includes managing activities necessary for design basis reconciliation, design criteria development, analytical basis/start up programs developed and worked to closure, within budget, on schedule, in accordance regulations and TVA policies and procedures. Also manages the electrical/I&C project engineering activities, including management of multiple engineering (A/E)

contractors, and coordinate engineering priorities with Licensing, Construction and Project Controls Managers to meet project objectives.

6.6.2 Manager Mechanical Design Engineering

This position is responsible for management of mechanical engineering scope for the Watts Bar Unit 2 completion project including the establishment of the design basis, analytical methods, Engineering Design, Systems Engineering, Start up test, Technical Support, Components Test and Inspection functions on the project. This responsibility includes managing activities necessary for design basis reconciliation, design criteria development, analytical basis/start up programs developed and worked to closure, within budget, on schedule, in accordance with regulations and TVA policies and procedures. Also manages the Mechanical project engineering activities, including management of multiple engineering (A/E) contractors, and coordinate engineering priorities with Licensing, Construction and Project Controls Managers to meet project objectives.

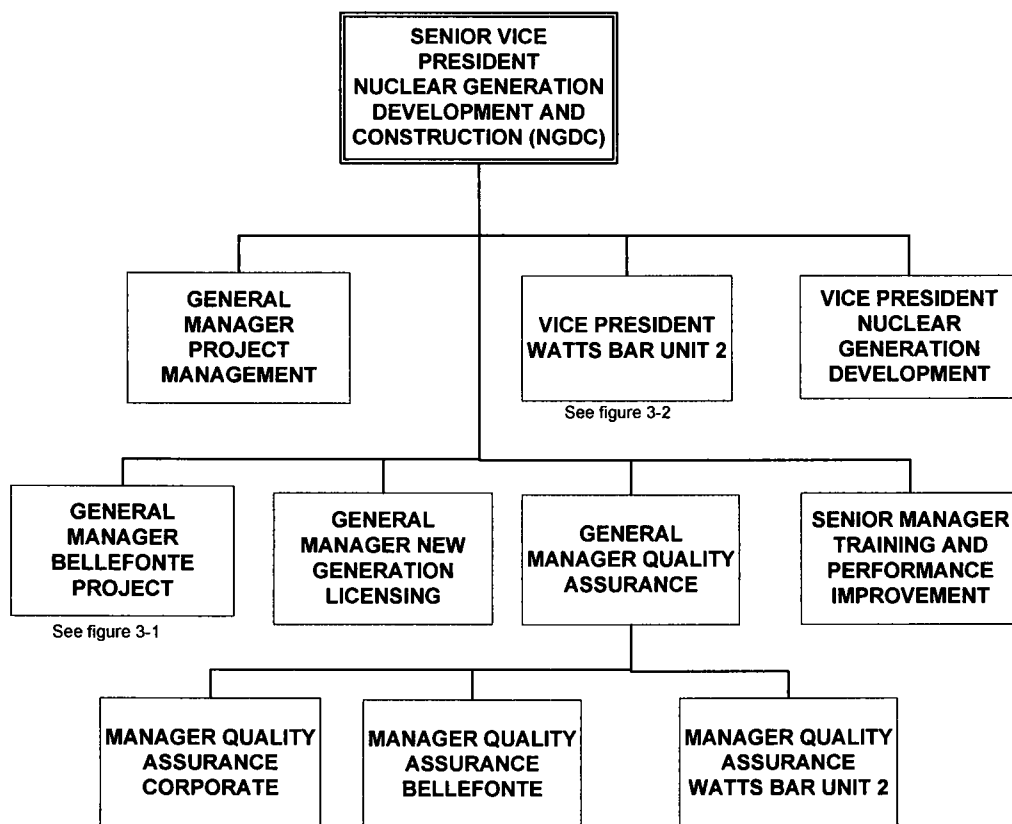
6.7 Completion Manager

This position reports directly to the Vice President WBN Unit 2. This position's assigned duties are established in procedures approved by the Vice President WBN Unit 2. This position assumes the authority of the Vice President WBN 2 as his designee.

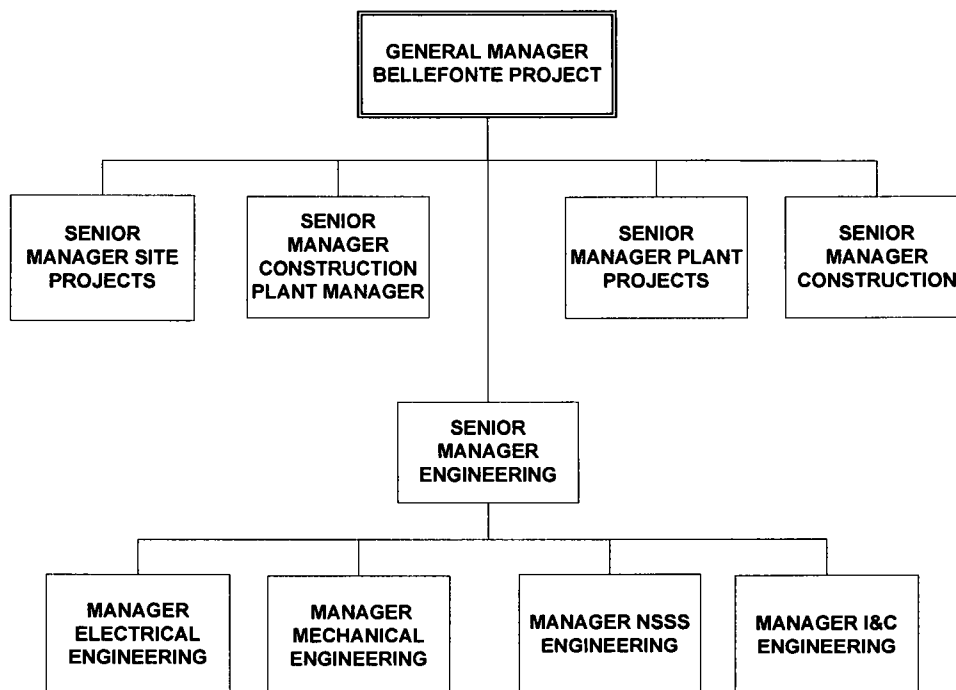
7.0 General Manager New Generation Licensing

This position provides oversight and direction of the Licensing functions in support of both short and long term NGDC projects. This position is responsible for the development of regulatory vision and strategy for regulatory issues for both Corporate and Project Sites and providing policy recommendations. This position provides governance and oversight of the project licensing organizations as well as Security and Employee Concerns.

**Senior VP Nuclear Generation Development and Construction**  
**Figure 3-0**



**General Manager Bellefonte Project  
Figure 3-1**



**Vice President Watts Bar Unit 2**  
**Figure 3-2**

