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# OPERATIONAL QUALITY ASSURANCE PROGRAM DESCRIPTION (WPPSS-QA-004)

REVISION NO. 14

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#### MANAGEMENT STATEMENT

It is the policy of Washington Public Power Supply System (hereinafter called the "Supply System") to design, construct and operate its nuclear power plants without jeopardy to the health and safety of the public. In support of this policy, the Supply System has established a Corporate Quality Assurance Program that is described in the following two documents:

- 1. Quality Assurance Program for Design and Construction
- 2. Operational Quality Assurance Program Description (Operations Phase)

These two documents contain the official Supply System Quality Assurance policies. Adherence by all affected Supply System organizations is mandatory.

The Operational Quality Assurance Program Description meets the applicable requirements of 10 CFR 50, Appendix B.

The Licensing & Assurance Directorate is mandated the responsibility and authority for establishing, administering and assuring implementation of the Supply System Corporate Quality Assurance Program. The Licensing & Assurance Director has the responsibility and authority, including stop work authority, to perform actions necessary to accomplish this mandate as delineated in the Corporate Quality Assurance Program manuals and documents.

The Licensing & Assurance Directorate has my delegated approval authority for the Operational Quality Assurance Program Description and any necessary modifications.

D. W. Mazur, Managing Director/Date

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#### WASHINGTON PUBLIC POWER SUPPLY SYSTEM

# OPERATIONAL QUALITY ASSURANCE PROGRAM DESCRIPTION

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#### 1 - ORGANIZATION

#### 1.1 PURPOSE

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This section provides a description of the authorities and responsibilities assigned to Supply System organizational units and individuals involved in establishing, implementing, verifying implementation, and measuring the overall effectiveness of the administrative controls and quality assurance program during the initial testing (pre-operational and startup testing) and subsequent operations phases of Supply System nuclear power plants.

#### 1.2 SUPPLY SYSTEM ORGANIZATION

The Supply System organization responsible for establishing, implementing, verifying implementation, and measuring the overall effectiveness of the administrative controls and quality assurance program for its nuclear power plants is as depicted in Figures 1-1 and 1-2. Portions of these activities may be delegated to external organizations qualified to the requirements of this Operational QA Program, hereafter referred to as QA Program, however, the responsibility shall remain with the Supply System.

#### 1.3 MANAGEMENT RESPONSIBILITIES

1.3.1 The Managing Director/Deputy Managing Director is responsible for the establishment of policies and for overall management of Supply System operations. The Managing Director has issued a Management Statement which commits the Supply System to design, construct, and operate its nuclear power plants without jeopardy to the health and safety of the public. The Managing Director is the ultimate Supply System authority on matters involving quality. The Managing



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Director/Deputy Managing Director operates through the Assistant Managing Director for Operations, the Director of Engineering, the Director of Projects, the Director of Licensing and Assurance, the Director of Information, and the Chief Financial Officer to provide for engineering, construction, procurement, quality assurance/ quality control, and operations activities for all Supply System nuclear power plants.

- 1.3.2 The Director, Licensing & Assurance reports to the Managing Director and is directly responsible for the definition, direction, and effectiveness of the overall QA program during design, construction, and operation phases of all Supply System nuclear power plants. Major functions of the Licensing and Assurance organization are:
  - a. Establishment and maintenance of assurance programs, nuclear operation standards and directorate procedures which incorporate nuclear safety considerations and comply with the Quality Assurance criteria delineated in Appendix B to 10CFR50.
  - b. Assuring through reviews, surveillances, inspections, and audits that Supply System and its suppliers' activities are being performed in accordance with written and approved documents which comply with applicable requirements defined by the assurance programs and nuclear operation standards.
  - c. Assessing the overall effectiveness of assurance programs' implementation, including evaluation of plant performance and reporting conclusions to the Managing Director.
  - d. Stopping unsatisfactory work and control further processing, delivery, or installation of nonconforming material.





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- e. Establishment and maintenance of adequate and qualified assurance staffing (on-site as well as off-site) levels based on workload analysis.
- f. Maintaining cognizance of changing regulatory requirements and providing controlled interface between the Supply System and regulatory agencies to assure that commitment documents receive the necessary degree and depth of reviews prior to transmittal.
- g. Providing licensing support functions in such areas as acquisition and maintenance of nuclear power plant construction permits and operating licenses.
- h. Providing trending of deficiencies to identify areas where corrective actions have not minimized recurrence.

The Director of Licensing and Assurance has effective communication channels with all Supply System senior management positions and has no duties or responsibilities unrelated to quality/safety assurance and licensing. To accomplish the above defined role, the Director of Licensing and Assurance operates through the Manager of Operational Assurance Programs, the Manager of Programs and Audits, the Safety Performance staff, the Manager of Nuclear Safety Assurance, and the Manager of Regulatory Programs. The qualification requirements for this position are as described in Appendix I, Qualification Requirements.

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- 1.3.2.1 The Manager, Operational Assurance Programs reports to the Director of Licensing and Assurance and is primarily responsible for integrating and directing the performance of quality assurance and quality control functions that are necessary to assure that the programs for initial testing and subsequent operation of Supply System nuclear power plants are adequate and are being implemented. The Manager of Operational Assurance Programs operates through the Plant QA and QC Managers. The qualification requirements for this position are as described in Appendix I, Qualification Requirements.
- 1.3.2.1.1 The Manager, WNP-2 Plant Quality Assurance (OA) reports to the Manager of Operational Assurance Programs and is directly responsible for all in-plant QA functions that are necessary to assure that documents (such as programs, plans, and procedures) to be used for the performance of plant activities are acceptable from quality assurance aspects and that they are being implemented. The Plant QA Manager has no duties or responsibilities unrelated to QA matters and has effective communication channels with all plant supervisory and management personnel. The Plant QA Manager is a member of the Plant Operating Committee (see Chapter 13 of the FSAR) and has sufficient authority and organizational freedom to identify problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. The Plant QA Manager has the authority and responsibility to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming material. When the unit is operating, the Plant OA Manager may recommend that the unit be shut down; the Plant Manager, however, has the final responsibility for the overall evaluation of all aspects and implications of shutting down the operating unit. Qualification requirements for this position are described in Appendix I, Qualification Requirements. The Plant QA Manager is specifically responsible for:

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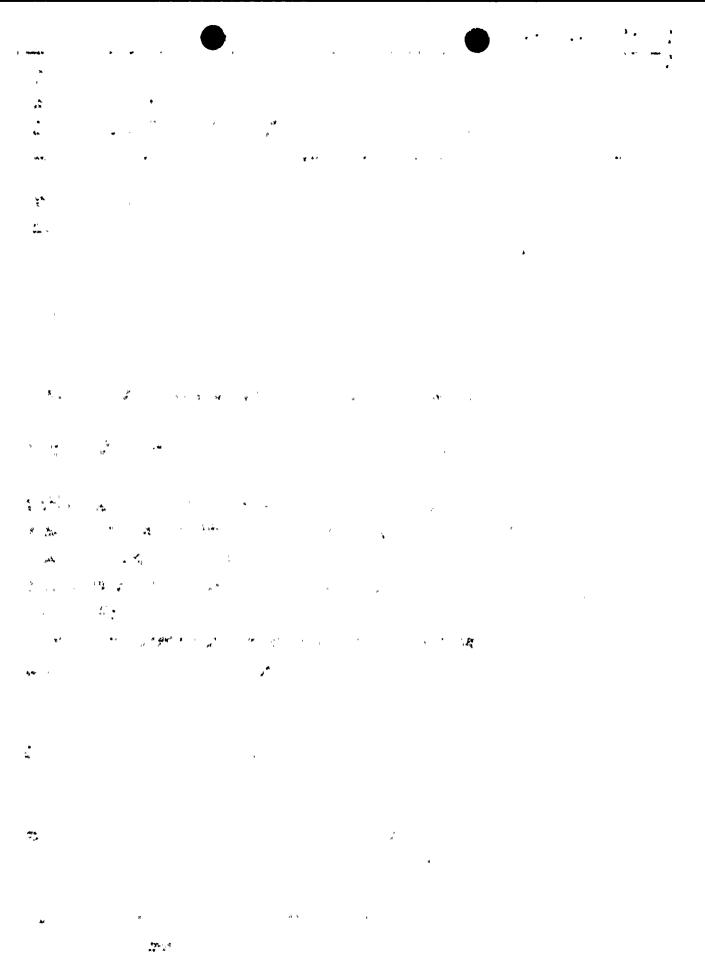


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- a. Review of and concurrence with documents affecting safety, including changes thereto, to assure that applicable QA requirements have been identified and specified therein. Documents subject to review and concurrence by QA reviewers include but are not limited to the following: (i) procedures which address: administrative controls, operations, maintenance, technical specifications, in-service inspection and testing, modifications, calibration, testing, and fuel handling; (ii) nonconformance and corrective action reports.
- b. Surveillance verification of in-plant activities to assure that they are being conducted in accordance with approved programs, plans, procedures, or instructions. Included in the scope of this surveillance program are: (i) control room operations; post modification/major maintenance testing and operational tests; maintenance, modification, repair, and calibration; personnel training; and refueling activities; (ii) activities associated with satisfying technical specifications and in-service inspection and testing; and (iii) activities associated with the implementation of security, fire protection, and radiological protection programs.
- 1.3.2.1.2 The Manager, WNP-2 Plant Quality Control (QC) (located on-site) reports to the Manager of Operational Assurance Programs and is directly responsible for all in-plant QC functions necessary to see that all needed examinations of materials, equipment, and workmanship are made and evaluated to assure that appropriate quality standards are met. Qualification requirements for this position are described in Appendix I, Qualification Requirements. In accomplishing this, the Plant QC Manager is responsible for:
  - a. Evaluation of procedures and instructions for accomplishing QC activities.

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- b. Determining and establishing hold points for inspections, examinations, and/or measurements to be accomplished during maintenance, modification, repair, and testing.
- c. Performing and evaluating the inspections, examinations, and/or measurements established.
- d. Rejecting work that does not meet quality standards.
- e. Assuring that proper staffing is available to meet plant work loads.
- 1.3.2.2 The Manager, Programs and Audits reports to the Director of Licensing and Assurance and is primarily responsible for QA Program development, procurement QA, project preservation QA, non-destructive examination (NDE), and inspector certification functions during initial testing and subsequent operations phase activities of Supply System nuclear power plants, and maintaining an organization of qualified auditors responsible for verifying implementation of the QA Program. Some of the specific responsibilities of the Manager of Programs and Audits are:
  - Establishment, maintenance, and control of the Operational QA Program
     Description (WPPSS-QA-004) and the Supply System Functional Manual for Nuclear Operation.
  - b. Qualification/certification of Supply System non-destructive examination
     (NDE) and inspection and test personnel.
  - c. Vendor qualification, review, and concurrence with vendor furnished programs and procedures, and source verifications (e.g., surveillances, inspections, and audits at vendor facilities).

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- d. Providing QC inspection of materials and equipment received by the Supply System.
- e. Acquisition and maintenance of ASME Certificates of Authorization and/or Owners Certificates.
- f. Ensuring that a written agreement with an Authorized Inspection Agency is obtained to provide for Authorized Nuclear In-Service Inspection Services.
- g. Review of and concurrence with programs, procedures, and/or instructions (including changes thereto) of off-site Supply System organizations to assure that they are clear, address applicable QA requirements, and are technically acceptable prior to approval for release.
- h. Performing QA audits of Supply System organizations and external organizations (e.g., the architect/engineers and the construction management).
- i. Developing audit schedules and selecting qualified personnel to perform the activities of this function.
- j. Certification of Audit Team Leaders.
- k. Training of audit personnel.
- 1. Forwarding of audit reports to the Chairman of the Corporate Nuclear Safety Review Board and management positions responsible for the areas audited for their review, assessment, and/or correction of identified deficiencies.
  - m. Maintenance of audit records.

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n. Ensuring that documentation and equipment of WNP-1 and WNP-3 are preserved such that the quality standards can be demonstrated on restart.

The Manager of Programs and Audits accomplishes this role through the Manager of Procurement Quality Assurance, Manager of WNP-1 and 3 QA, and staff engineers.

- 1.3.2.2.1. The Manager, Procurement Quality Assurance reports to the Manager of Programs and Audits and is primarily responsible for the definition and implementation of source surveillance/audit program for verification of activities performed by the Supply System vendors (including the Nuclear Steam Supply System vendors). He is further responsible in assuring that all items received for WNP-2 meet the required quality standards. The Manager of Procurement Quality Assurance is specifically responsible for:
  - a. Review of and concurrence with procurement procedures and documents for items and services.
  - b. Establishment of vendor hold points for inspection and release of material/equipment for shipment.
  - c. QC receipt inspection of materials and equipment received by the Supply System, establishing appropriate hold points.
  - d. Establishment and maintenance of evaluated vendors list.
  - e. Planning, coordinating, and performing source surveillances, source inspections, and source audits to verify implementation of vendors' QA/QC programs.

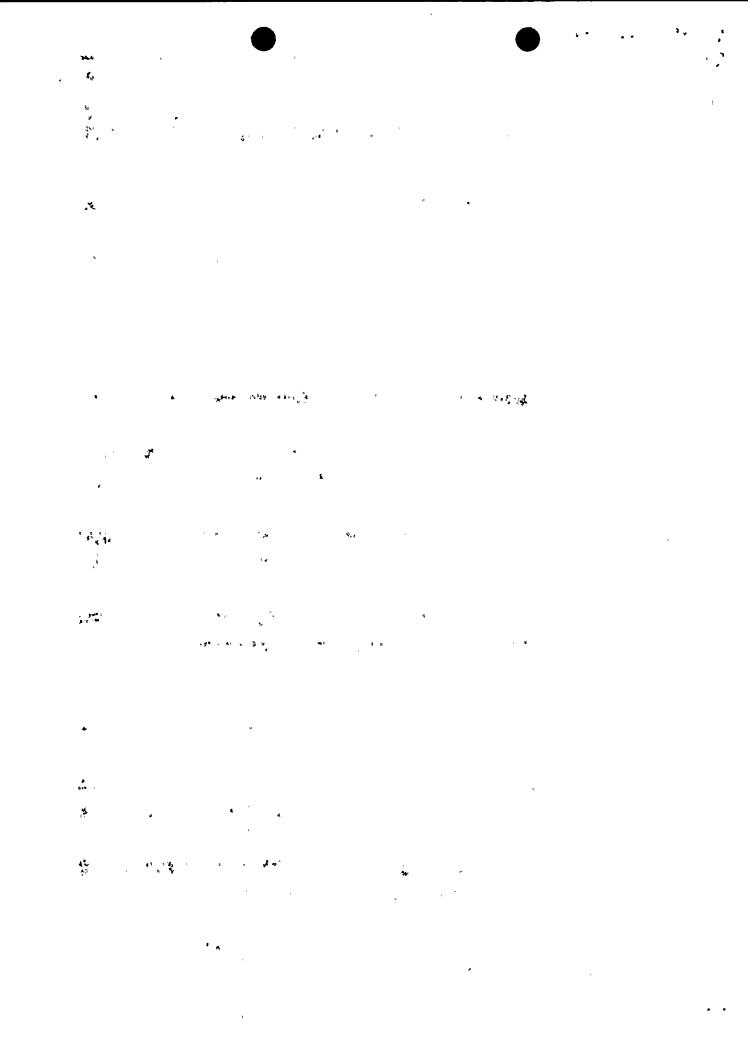
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- f. Review and approval of vendor furnished QA/QC procedures and programs.
- 1.3.2.2.2 <u>Manager, WNP-1 or WNP-3 QA</u> reports to the Manager of Programs and Audits and is primarily concerned with assuring that the records and equipment of the project are maintained such that they may be shown to meet quality standards on restart.
- 1.3.2.2.3. The Audit Staff reports to the Manager of Programs and Audits and performs audits of programs and organizations as required by the Technical Specifications, regulating bodies, and management concerns.
- 1.3.2.3 The Manager, Nuclear Safety Assurance reports to the Director of Licensing and Assurance and is primarily responsible for integrating and directing nuclear safety assurance and quality evaluations of technical and operational activities. These evaluations are necessary to assure that such activities meet or exceed regulatory requirements and are being implemented in a manner to improve the safety and performance of WNP-2. The Manager of Nuclear Safety Assurance operates through the WNP-2 Nuclear Safety Engineering Manager and the Operating Event Analysis and Resolution Manager.
- 1.3.2.3.1 <u>The Manager, WNP-2 Nuclear Safety Engineering</u> reports to the Manager of Nuclear Safety Assurance and is responsible for:
  - a. Assessing programs, processes, and activities including engineering, maintenance, modifications, operational problems, technical support activities, and operational analysis that affect plant nuclear safety and reliability.
  - b. Assessing plant operations and performance regarding conformance to regulatory requirements.





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- c. Independent design functional and safety evaluations.
- d. Self-initiated SSFI reviews and other similar plant safety system operability reviews.
- e. Independent assessments of engineering product quality.
- f. Engineering programs, process, and procedure review.
- g. Evaluating industry operating experience, including recommendations for improvements in overall plant performance.
- 1.3.2.3.2 <u>The Manager, WNP-2 Operating Event Analysis and Resolution</u> reports to the Manager of Nuclear Safety Assurance and is responsible for:
  - a. Evaluating in-plant operating experience, including recommendations for improvements in overall plant performance.
  - b. Evaluating and determining the root cause of plant related events, including human performance.
  - c. Tracking the implementation of industry operating experience evaluations and implementing specified corrective actions associated with a. and b. above.
- 1.3.2.4 <u>The Manager, Regulatory Programs</u> reports to the Director of Licensing and Assurance and is responsible for:
  - a. Acquiring and maintaining operating licenses of Supply System nuclear power plants.

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- b. Establishing and maintaining interfaces between the Supply System and the Nuclear Regulatory Commission.
- c. Defining and implementing programs which assure that licensing submittals receive an adequate technical review from cognizant Supply System, NSSS, or AE personnel prior to transmittal.
- d. Tracking licensing commitments and taking action necessary to assure that they are being met in a timely manner.
- e. Maintaining awareness of changing licensing requirements.
- f. Providing coordinated development of responses and comments to new laws, regulations, regulatory guides, and other regulatory issuances.
- g. Supporting the Corporate Nuclear Safety Review Board (CNSRB) in its activities as defined by the Technical Specifications, the Managing Director, and its chairman.
- 1.3.3 <u>The Assistant Managing Director, Operations</u> reports to the Managing Director and is responsible for:
  - a. Safe and efficient operation of all Supply System nuclear power plants.
  - b. Safe and successful completion of initial testing activities for WNP-2 (through the WNP-2 Plant Manager).
  - c. Establishing and monitoring maintenance systems common to all nuclear power plants.

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- d. Training of nuclear plant staff and support personnel.
- e. Development of programs and procedures to ensure uniform application at all nuclear power plants.
- f. Radiological protection, industrial safety, fire protection, plant security, emergency preparedness, and radioactive waste management.

To accomplish this role, the Assistant Managing Director for Operations operates through the Plant Managers, the Technical Training Manager, the Performance Evaluation Manager, and the Support Services Manager.

- 1.3.3.1 The Plant Manager for each of the Supply System nuclear power plants reports to the Assistant Managing Director for Operations and is directly responsible for safe and efficient operation of the plant in accordance with the requirements of the Operating License, the Plant Technical Specifications, and the Plant Procedures

  Manual. Some of the specific responsibilities of the Plant Manager are:
  - a. Planning, coordinating, and directing all test, operation, modifications, maintenance, and refueling activities subsequent to the issuance of an Operating License.
  - b. Authorizing all plant modifications subsequent to the issuance of an Operating License.
  - c. Qualifying and training plant staff.
  - d. Initiating and approving purchase requisitions.

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- e. Controlling purchased equipment and materials intended for plant use.
- f. Establishing and implementing a calibration program for measuring and test equipment (including installed instruments covered by the Plant Technical Specifications).
- g. Dispositioning of nonconforming items.
- h. Controlling and maintaining on-site operations records.
- i. Implementing the in-service inspection program.

The Plant Manager operates through the Operations Manager, the Maintenance Manager, the Technical Manager, the Health Physics/ Chemistry Manager, and the Administration Manager. The plant organization and functional responsibilities of key plant personnel are described in Chapter 13 of the Final Safety Analysis Report for the applicable nuclear power plant.

- 1.3.3.2 The Manager, Technical Training reports to the Assistant Managing Director for Operations and is responsible for operations training policy and guidance for the nuclear plants and the conduct of central training services for nuclear plant operations.
- 1.3.3.3 <u>The Manager, Performance Evaluation</u> reports to the Assistant Managing Director for Operations and is responsible for:
  - a. Providing a performance evaluation program which measures and analyzes the effectiveness and efficiency of power plant operating performance.

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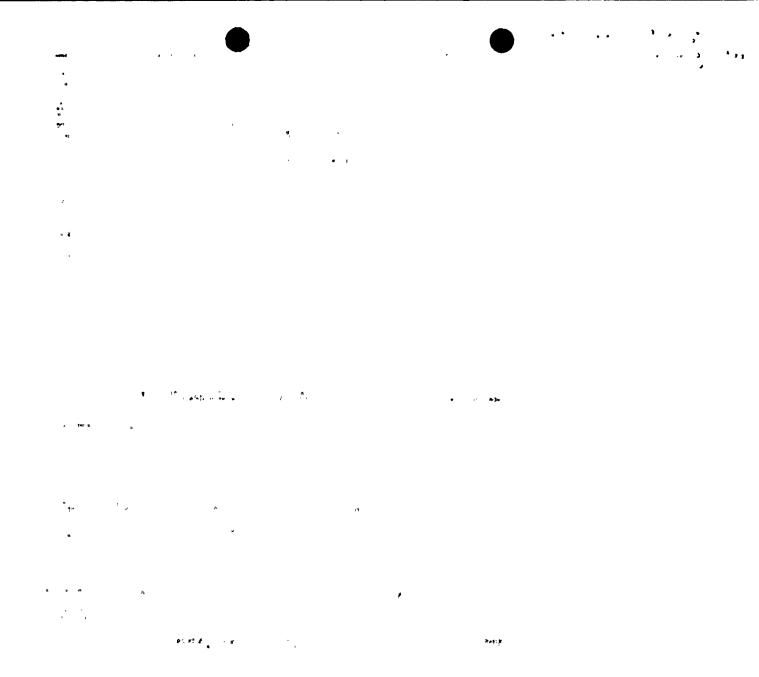
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- Providing the centralized information system to interface with the Institute for
   Nuclear Power Operation and other industry inquiries, requests, and information.
- 1.3.3.4 The Manager, Support Services reports to the Assistant Managing Director for Operations and is responsible for the development and implementation of policies and programs which support operation of Supply System nuclear power plants in the areas of radiological protection, safeguards and physical security, industrial safety and fire protection, fitness-for-duty screening, emergency preparedness, environmental studies, and radiological and nonradiological environmental monitoring for WNP-2. To accomplish this role, the Manager of Support Services operates through the Manager of Health, Safety, and Fire Protection; the Manager of Security Programs; the Manager of Emergency Preparedness; and the Manager of General Services.
- 1.3.3.4.1 <u>The Manager, Health, Safety, and Fire Protection</u> reports to the Manager of Support Services and is responsible for:
  - a. A health physics program to provide support to the plant in the areas of radiological assessment, the Off-Site Dose Calculation Manual (ODCM), site meteorology, routine and non-routine dose calculations, including the methodology.
  - b. The development and maintenance of an industrial safety and fire protection program to support plant management in implementing programs, including training dealing with personnel health and safety, loss prevention, and fire protection.



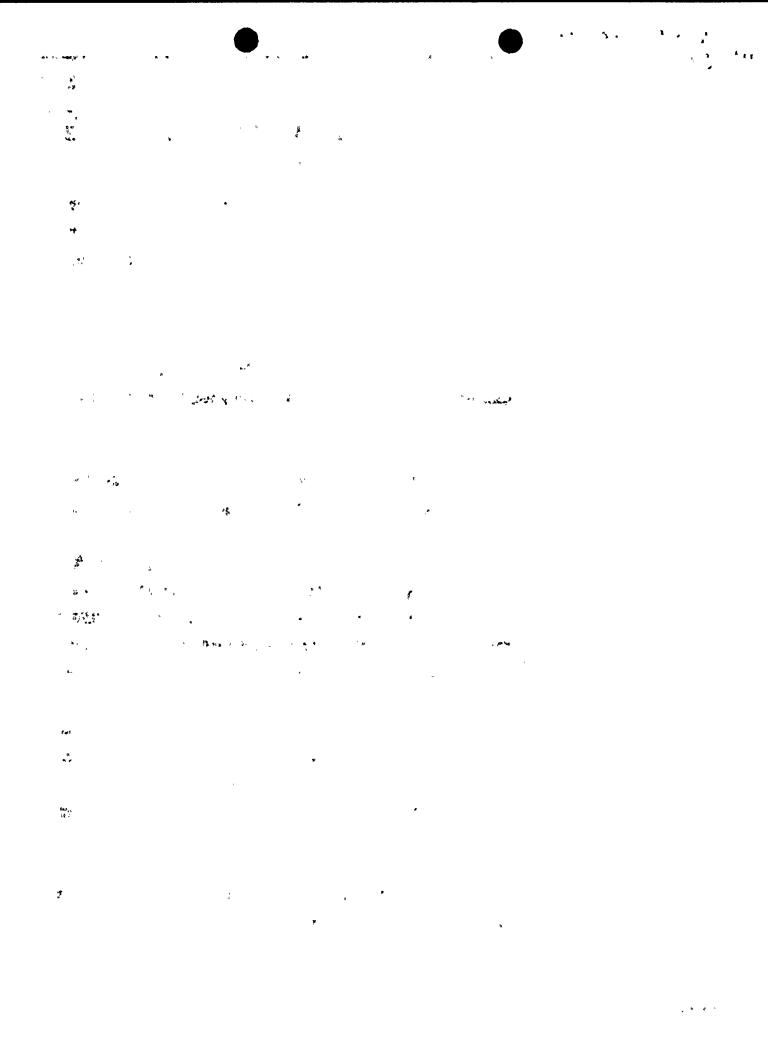
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- 1.3.3.4.2 <u>The Manager, Security Programs</u> reports to the Manager of Support Services and is responsible for overall Supply System security activities. The Manager of Security Programs is specifically responsible for:
  - a. Administering a security program which includes preemployment screening, physical security surveys, and investigations and loss prevention.
  - b. Managing the security force during the operational phase by assuring that physical security is consistent with needs and is maintained within individual plant safeguards security plans.
  - c. Providing training, administrative, and technical assistance to Plant Managers in the area of plant security.
- 1.3.3.4.3 The Manager, Emergency Preparedness reports to the Manager of Support Services and is responsible for developing and maintaining an emergency response program that includes plans, procedures, training, and drills and exercises.
- 1.3.3.4.4 <u>The Manager, General Services</u> reports to the Manager of Support Services and is responsible for:
  - a. Developing and maintaining a laboratory services program to provide support to the plant in the areas of environmental studies, radiological, and non-radiological monitoring, fitness-for-duty screening, and central instrument maintenance and calibration.





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- b. Developing and maintaining a facility planning program that establishes a process for meeting annual facility needs, including the ability to respond to immediate high priority issues. This effort also includes a long-term (5-7 year) planning effort.
- c. Providing a facility and equipment maintenance program which includes automobiles, standby power generators (out of plant), and other heavy equipment. This responsibility will also include equipment replacement as appropriate.
- d. Developing and maintaining administrative support skills to augment word processing capabilities throughout the company.
- 1.3.4 The Director, Engineering reports to the Managing Director and is responsible for providing project engineering and design control, reactor safety evaluation, nuclear analysis, nuclear fuel supply, and maintenance/surveillance engineering support as required for each Supply System nuclear plant. The Director of Engineering is specifically responsible for:
  - a. Providing project engineering for projects under construction and preservation management and engineering for mothballed projects.
  - b. Providing design and engineering for operating plant design changes and modifications.
  - c. Providing programs for pre-service inspection, in-service inspection, and non-destructive examinations.

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- d. Providing technical resolution of nuclear safety, licensing, and geological issues.
- e. Initial fuel supply.
- f. Reload fuel supply, design, and licensing.
- g. . Maintaining a current engineering data base for each plant.

To accomplish this role, the Director of Engineering operates through the Managers of Design Engineering, Engineering Services, Engineering Programs, WNP-1 and 3 Engineering, and Engineering Management Support.

- 1.3.4.1 <u>The Manager, Design Engineering</u> reports to the Director of Engineering and is directly responsible for:
  - design and design document content is defined, controlled, and verified.
    - b. Managing the direct engineering and design for plant operation through retention of expert technical knowledge of plant systems, structures, and components.
    - c. Managing engineering subcontractors for engineering design and other consulting services.
    - d. Structural design, stress analysis, and specialized ASME Code expertise for plant pressure retaining systems and their supporting structures.

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- 1.3.4.2 <u>The Managers, WNP-1 and 3 Engineering</u> report to the Director of Engineering and are directly responsible for:
  - a. Preservation of WNP-1 and WNP-3 design assets in a state of readiness for resumed construction.
  - b. Project engineering in preparation for resumption of active construction projects.
  - c. Developing technical criteria, requirements, and specifications.
  - d. Managing Architect Engineer (A/E) activities relative to development of design, implementation of licensing commitments, and testing.
  - e. Approving all design phase related license and permit commitments and assuring conformance to these commitments in equipment and design contracts.
  - f. Discharging the site-specific technical duties and responsibilities required of an ASME N-Certificate holder and for the Owner's Certificate of Authorizations.
  - g. Technical support of plant startup and certification of plant systems readiness for operation.
  - h. Preparing pre-service and in-service inspection programs for WNP-1/3.
- 1.3.4.3 The Manager, Engineering Programs reports to the Director of Engineering and is directly responsible for engineering support to WNP-1 and WNP-3 Engineering and for providing staff support to Design Engineering for:

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- a. Performing in-service inspection and testing program plans and related code and regulatory interface.
- b. Nondestructive examination and testing services.
- c. Materials and welding engineering and program development.
- d. Codes and standards interpretation and guidance.
- e. Equipment qualification programs.
- f. Corporate technical positions and standards, as well as operating experience reviews, related to the above topical areas.
- g. Engineering criteria for Class 1 and commercial grade dedicated spare parts procurement.
- h. Managing Master Equipment List (MEL), Safety Related Material (SRM), Class 1 Electrical (C1E), Restricted Use Equipment List (RUEL) data base, and other engineering data bases.
- 1.3.4.4 <u>The Manager, Engineering Services</u> reports to the Director of Engineering and is directly responsible for:
  - a. The supply, engineering, and efficient in-core management of nuclear fuel for each nuclear plant.
  - b. Geological studies programs to determine the acceptability of plant sites and seismic design bases.

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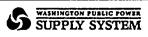


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- c. Transient analysis and licensing issue resolution to support technical specification changes and reload fuel licensing.
- d. Reliability and availability analyses to improve plant performance, safety, and maintainability.
- e. Engineering support for plant computer system's software configuration control.
- f. Managing engineering support for plant operation through retention of expert technical knowledge of plant-specific analysis and requirements for continued plant operation.
- g. Managing responses to and resolution of emergent plant operation issues, safety analyses, and regulatory concerns.
- 1.3.4.5 The Manager, Engineering Management Support reports to the Engineering Director and is responsible for:
  - a. Interfacing with site organizations to coordinate and integrate engineering programs and support functions.
  - b. Managing a single administrative process by which all engineering-related activities and commitments are assigned, scheduled, tracked, and dispositioned.
  - c. Implementing configuration control by establishing site-specific policy, procedures, and methods that allow control and accountability.

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- d. Managing design and drafting services to support plant modifications and design engineering.
- e. Monitoring the performance of engineering organizations relative to costs, accomplishments, and adequacy of support to dependent organizations.
- 1.3.5 The Director, Projects reports to the Managing Director and is responsible for providing project management support for each Supply System nuclear plant. The Director, Projects is specifically responsible for:
  - a. Providing project management for power projects under construction and preservation management for mothballed power projects.
  - b. Providing project management for disposition of assets from terminated power projects and disposition of major assets surplus to operating power projects.
  - c. Providing for site restoration for power project sites which are to be abandoned.
  - d. Providing specialized project management for major construction projects which results in off-line completion of major additions to operating plants and support facilities.
  - e. Providing specialized project management for major procurement acquisitions for operating power plants.
  - f. Providing project management of focused technical studies on operational improvement and/or uprating of operational power plants.

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To accomplish this role, the Director, Projects operates through the WNP-1/3 Project Manager; the Simulator Projects Manager; and the Special Projects Manager.

- 1.3.5.1 The WNP-1/3 Project Manager reports to the Director, Projects and is directly responsible for:
  - a. WNP-1, WNP-3, and HGP site preservation, including preservation of licenses, permits, agreements, and overall assets in a state of readiness for resumed construction.
  - b. Project management in preparation for resumption of active construction projects.
  - c. Approval of all construction phase-related license and permit commitments and assuring conformance to these commitments in equipment and design contracts.
  - d. Sale and final disposition of assets from canceled projects WNP-4/5.
- 1.3.5.2 <u>The Manager, Simulator Projects</u> reports to the Director, Projects and is directly responsible for:
  - a. Technical maintenance of the current simulator to support operator testing.
  - b. Overall project and technical management for the procurement of the replacement simulator.
  - c. Certification of the replacement simulator to applicable federal standards.

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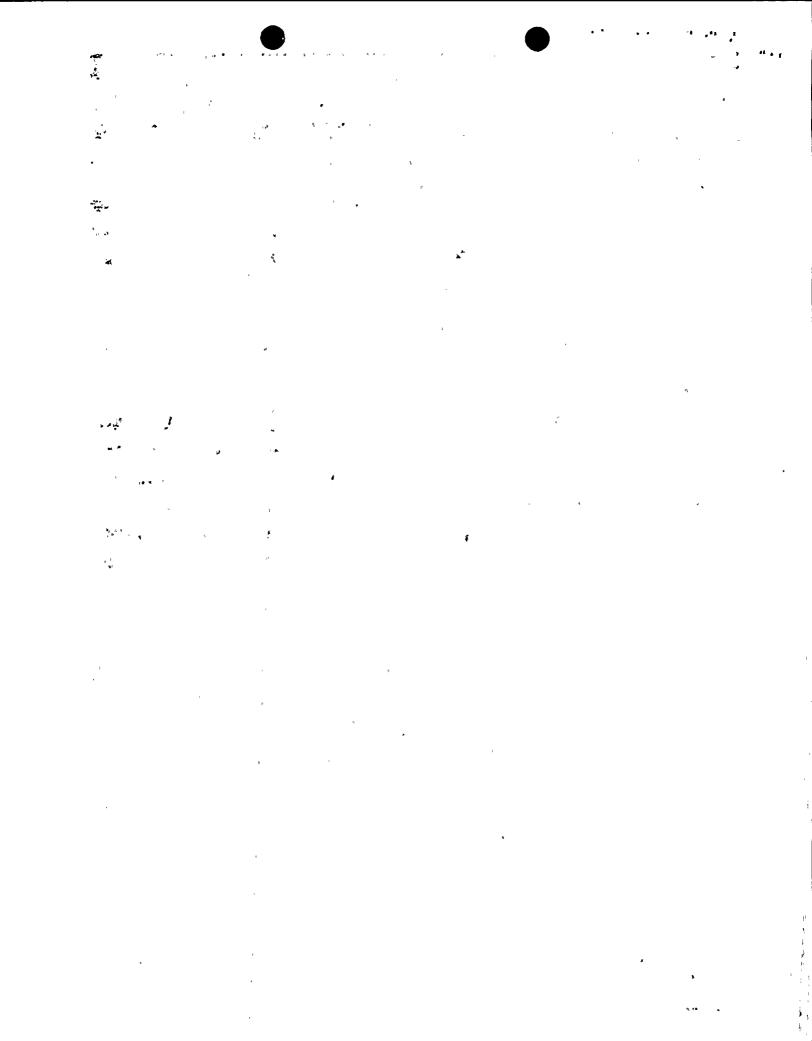
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- 1.3.5.3 <u>The Manager, Special Projects</u> reports to the Director, Projects and is directly responsible for:
  - a. Major construction, procurement and technical project management supporting operating power plants and facilities.
  - b. Technical and project management for focused activities which are intended to improve operating plant output and reliability.
- 1.3.6 The Chief Financial Officer reports to the Managing Director and is responsible for providing procurement and storage control services that are required to support operation and maintenance of Supply System nuclear power plants. To accomplish this role, the Chief Financial Officer operates through the Manager of Corporate Contracts and Materials Management.
- 1.3.6.1 <u>The Manager, Corporate Contracts and Materials Management</u> reports to the Chief Financial Officer and is responsible for:
  - a. Development of corporate level procurement policies and procedures.
  - b. Procurement of items and services in response to approved purchase requisitions.
  - c. Coding, cataloguing, handling, storage, shipping, and disposal of procured items.





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- 1.3.7 The Director, Information reports to the Managing Director, and is responsible for the Supply System records management program. To accomplish records management responsibilities, the Director, Information operates through the Manager of Records Management.
- 1.3.7.1 <u>The Manager, Records Management</u> reports to the Director, Information and is responsible for:
  - a. Providing program definition and policy development for Supply System records management activities, which includes processing, retrieval, storage, and dispositioning of records.
  - b. Providing administrative support functions necessary for the maintenance of corporate manuals and procedures.

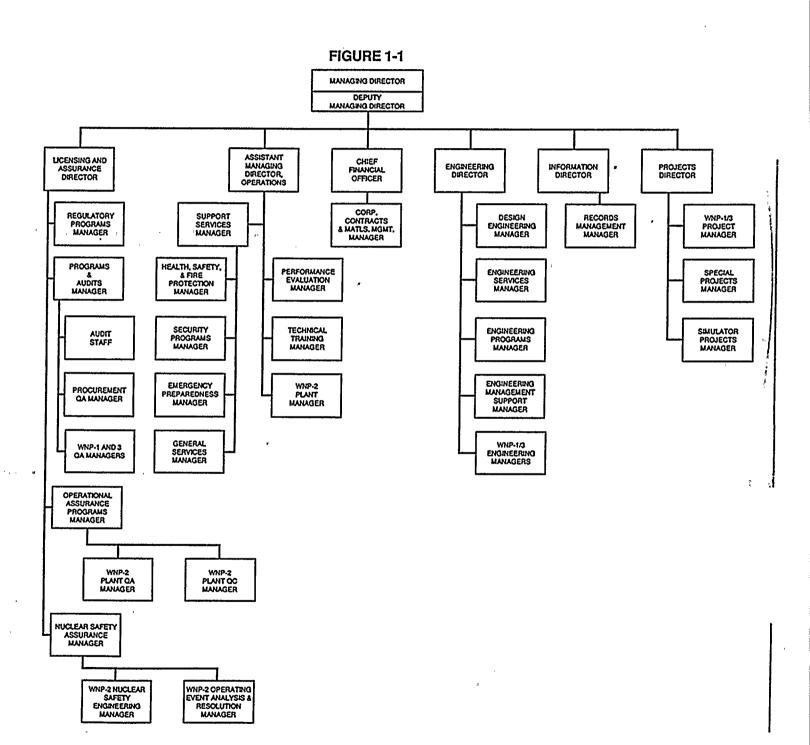
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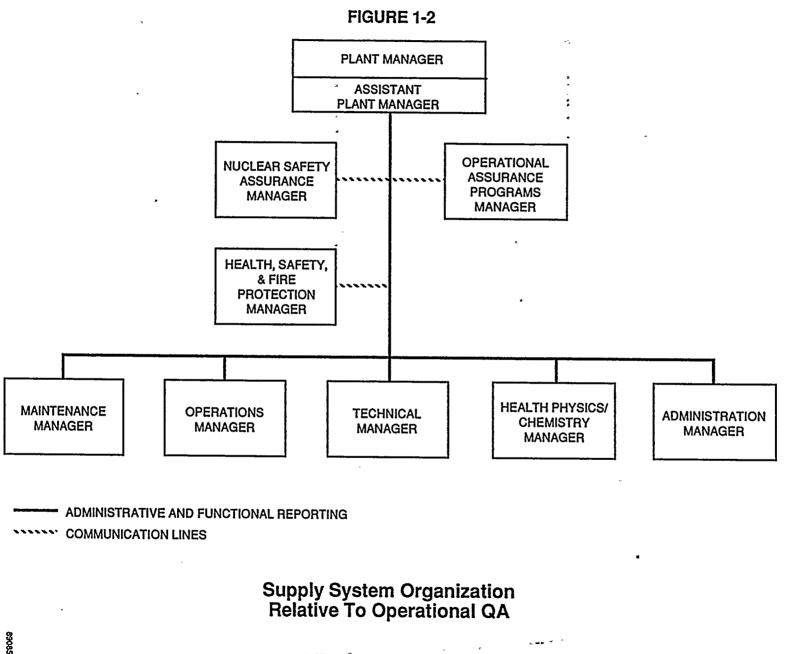
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### 2 - QUALITY ASSURANCE (OA) PROGRAM

### 2.1 PURPOSE

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This section provides an overall description of the QA Program that will be applied to initial testing and subsequent operation and maintenance activities throughout the life of Supply, System nuclear power plants.

### 2.2 GENERAL

- 2.2.1 The QA Program will be implemented through a series of Nuclear Operation Standards (NOSs) contained in the Supply System Functional Manual for Nuclear Operation. In turn, these NOSs will be implemented by Supply System organizational procedures, programs, or plans which prescribe detailed methods for functional accomplishment. The NOSs will address the applicable requirements of Appendix B to 10CFR50 and Sections 1 through 18 of the QA Program. A matrix of Nuclear Operation Standards cross referenced against each criteria of Appendix B to 10CFR50 is included in Table 2-1. The NOSs and implementing procedures, programs, or plans will collectively comply with the regulatory positions of QA-related Regulatory Guides as identified and modified in Appendix II, Position Statements.
- 2.2.2 A list of safety-related items that will be subject to the applicable controls of the QA Program is included in the Final Safety Analysis Report (FSAR) for the applicable Supply System nuclear power plant. Changes to this listing shall be controlled by the Director of Engineering and approved by the Plant Manager.

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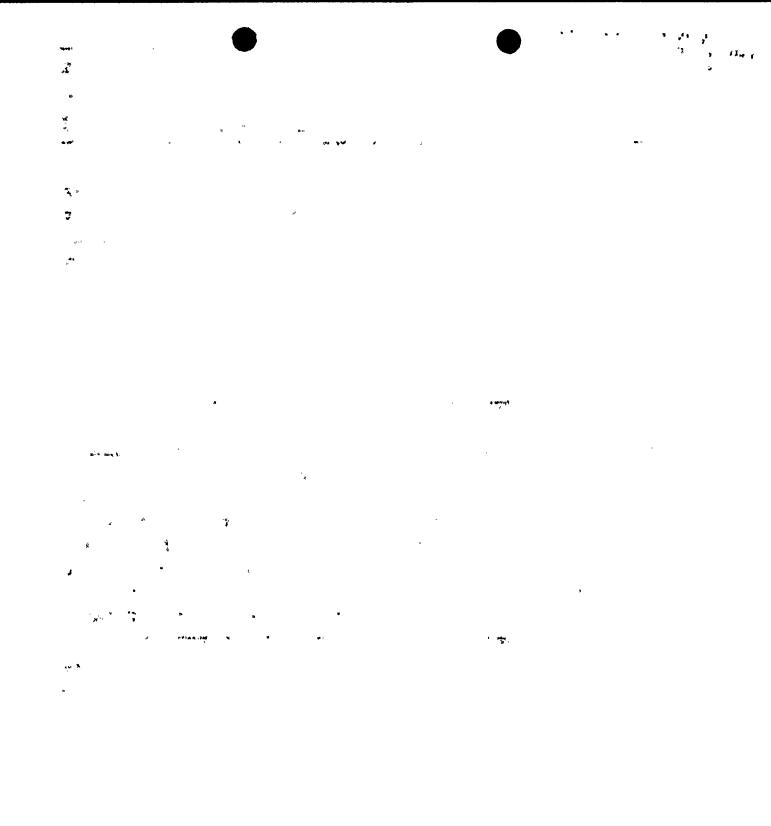
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- 2.2.3 Applicable provisions of the QA Program shall be implemented by the earliest of the following and shall remain in effect for the life of Supply System nuclear power plants:
  - a. Prior to inception of the activity.
  - b. At the time of temporary/permanent transfer of system/component custody to Test and Startup organization.
  - c. Ninety (90) days prior to initial fuel loading.
- 2.2.4 Revisions to the QA Program will be made by the Licensing and Assurance organization as follows:
  - a. Proposed changes to the QA Program will be evaluated to determine whether or not they would result in a reduction of commitments previously accepted by the Nuclear Regulatory Commission (NRC).
  - b. Changes that do not reduce the commitments may be implemented prior to forwarding such changes to the NRC. However, all such changes shall be forwarded to the NRC at least annually.
  - c. Changes that reduce commitments will be forwarded to the NRC for their review and acceptance prior to implementation. Such changes shall be regarded as accepted by the NRC upon receipt of a letter from the NRC to this effect or sixty (60) days after submittal to the NRC, whichever occurs first.

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- 2.2.5 Managers of Supply System organizations responsible for implementing the applicable provisions of the QA Program shall assure that activities that affect safety-related functions of plant items are performed by personnel who have been indoctrinated and trained. The scope, objective, and method of implementing the indoctrination and training program shall be documented. Proficiency of personnel performing activities that affect safety-related functions of plant items shall be maintained by retraining, re-examination, and/or recertifying, as applicable. Methods shall be provided for documenting training.
- The scope, implementation, and effectiveness of the QA Program is routinely audited by the Licensing and Assurance Organization.

  Copies of audit reports are presented to Supply System management to provide for assessment of the effectiveness of the QA Program. Additionally, at least once per two (2) years, the Supply System management arranges for an independent evaluation of the adequacy of the scope, implementation, and effectiveness of the QA Program. This is accomplished by knowledgeable personnel outside of the Licensing and Assurance Organization to assure achievement of an objective program assessment. Results of these independent evaluations are reported to the Managing Director/Deputy Managing Director.

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### TABLE 2-1

# OPERATIONAL QA PROGRAM DESCRIPTION IMPLEMENTING NUCLEAR OPERATION STANDARDS (Page 1 of 2)

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NO	S-1	Organizational Responsibilities/ Changes	х																				
NO	S-2	Control of the Functional Manual for Nuclear Operation	X				X	4															
NO	S-3	Operational QA Program Description Control	X					>	4														
NO	S-4	Plant Operations and Maintenance Control	X		X				!		X	Х			X	X	X						
NO	S <b>-</b> 5	Personnel Training, Qualifi- cation and Certification	X	X									Χ										
NO	S-6	Review Committees (CNSRB & POC)	X	]	l		l	ĺ	I	1	ì						1						l
NO	S-8	Nuclear Safety Assurance Assessment Program	Х																				
NO	S-9	Procedures/Instructions.Control	X		Įχ		[X	X		1	1	I					1					[	
NO:	S-11	Conduct of Licensing Activities	X		<b>I</b> .	l		[X		1	I	١				1	j	1	1				
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### TABLE 2-1

### OPERATIONAL QA PROGRAM DESCRIPTION IMPLEMENTING NUCLEAR OPERATION STANDARDS (Page 2 of 2)

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	NOS-24	Control of Records	X						,										Х	
١	NOS-26	Computer Software QA	X	1	X		I	>		1.		1	1			1	l	i		
1	NOS-27	Procurement and Storage Control	X		1	ĮΧ		>	( )	(					X	1	ĺ	1		
	NOS-30	Control of Nonconformances and Corrective Action	X		X			)								X	Х	X.		
	NOS-32	Configuration Management Program	X		X			>												
I	NOS-33	Inservice Inspections	ĮΧ	1	l		1	>		I	ΙX	X	ΙX	1		l	1			
	NOS-34	Inservice Testing of Pumps and Valves	X										X							
I	NOS-35	Nuclear Materials Control	X	1					1	İ		1	1			ΙX			1	
1	NOS-36	Chemistry	ĮΧ	1					I		1				1	ĮΧ	1	İ		
	NOS-37	Rad. Environmental Mon. Program	ΙX		Ι.				1	ĺ			I		ŀ	1				
	NOS-39	Fire Protection Program	١X	1	[		]	1	1	1	1			,		ΙX.	]	1		
1	NOS-40	Radioactive Waste Management	ĮΧ		I	1				1				1		i				
	NOS-41	QA Program for Radioactive Materials Shipping Packages	X																	
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### 3 - DESIGN CONTROL

### 3.1 PURPOSE

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This section sets forth requirements for the control of new designs, changes thereto, and plant modifications that affect safety-related functions of structures, systems, and components.

### 3.2 GENERAL

- 3.2.1 Organizations (both internal and external) participating in the preparation, review, approval, and verification of design documents (drawings, design input and criteria, specifications, design analysis, computer programs, system descriptions, procedures, and instructions) associated with new designs, changes thereto, and plant modifications shall develop and implement procedures that clearly delineate actions to be accomplished. These procedures shall contain provisions to assure that:
  - a. Applicable regulatory requirements and design bases specified in the Final Safety Analysis Report are correctly translated into design documents.
  - b. Appropriate quality standards are specified and included in design documents and that changes from such standards are documented, approved, and controlled.
  - c. Design analysis (reactor physics, stress, thermal, hydraulic, accident, etc.) is performed, where applicable.

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### 3.2.1 (cont'd.)

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- d. Items such as compatibility of materials, parts, components, and processes selected; accessibility for inservice inspection, maintenance, and repair; and delineation of acceptance criteria for inspections and tests are considered, where applicable, during the design development and review phases.
- e. Errors and deficiencies discovered in approved design documents that could adversely affect safety-related structures, systems, and components are documented and that appropriate corrective action is taken.
- f. Development, maintenance, and use of computer code programs is controlled. Where the use of a particular computer code for performing design calculations is specified, such computer code is verified and certified for use.
- 3.2.2 Where two or more design organizations are involved in the performance of design, necessary interface controls (both internal and external) shall be documented and controlled between the participating organizations, particularly in the area of review, approval, release, distribution and revision of interface documents.
- Design verification, to provide assurance that the design meets the specified design inputs, shall be performed by utilizing methods such as design reviews, alternate calculations, or qualification testing.
- 3.2.4 Design verification procedures shall be established and implemented. These procedures shall:
  - a. Provide for the determination of the method for design verification that will be utilized.

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#### 3.2.4 (cont'd.)

- b. Provide assurance that the design verification is performed and documented by personnel other than those who performed the original design but who may be from the same organization.
- c. Identify the responsibilities of the verifier; areas, features, and pertinent considerations to be verified; and the documentation to be generated.
- d. Require that where verification method is only by test, the prototype, component, or feature testing is performed at the earliest practicable stage and under the most adverse design conditions.
- e. Require the accomplishment of design verification, in all cases, prior to relying upon the item to perform its safety function.
- . 3.2.5 Design documents shall be reviewed for adequacy by the originating organization unless delegated to another qualified organization.

  Such reviews shall be documented and maintained on file.
  - 3.2.6 Changes to approved design documents shall be subjected to design control measures comparable with those that were applied to the original design and shall be approved by the same organization that approved the original design, unless delegated to another qualified organization.
  - 3.2.7 Measures shall be established to assure that plant personnel and other affected organizations are made aware of design changes/ modifications that affect the performance of their duties.