Florida Power & Light Company, P. O. Box 14000, Juno Beach, FL 33408-0420

FPL

L-2000-143
10 CFR 50.54(a)(3)
10 CFR 50.4

JUN 28 2000

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Topical Quality Assurance Report (FPLTQAR 1-76A)

Pursuant to 10 CFR 50.54(a)(3), including the provisions of the associated direct final rule effective April 26, 1999, attached is the annual update of the Florida Power and Light Company (FPL) Topical Quality Assurance Report (TQAR).

Enclosure 1 includes a summary of the changes made to the TQAR and Enclosure 2 contains a "red-lined" version of the TQAR showing all changes that have been made since the last annual submittal (FPL letter L-99-151 dated June 30, 1999). Enclosure 3 is the current TQAR including all revisions issued through Revision 79 dated April 13, 2000. The FPL Nuclear Assurance Department has reviewed all changes and it has been concluded that these changes do not reduce the commitments in the FPL program description.

The FPL Topical Quality Assurance Report is supplemented by chapters from the Updated Final Safety Analysis Reports (UFSAR) for both St. Lucie and Turkey Point. Enclosures 4 and 5 are the applicable sections of Chapter 17 from the St. Lucie Unit 1 and Unit 2 UFSARs and provide additional detail on the plant procedure review process. No changes have been made to these sections since the last annual FPL TQAR submittal. Enclosure 6 is Chapter 12 from the Turkey Point Unit 3 and Unit 4 UFSAR and provides plant specific details of the FPL QA program related to Administrative Controls. The changes to the Turkey Point UFSAR are being made in accordance with approved license amendment number 201/195 (dated October 6, 1999) for Turkey Point Unit 3 and Unit 4.

Should there be any questions, please contact us.

Very truly yours,

R J Acosta

Robert J. Acosta
Director
Nuclear Assurance

Enclosures

cc: Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant
Senior Resident Inspector, USNRC, St. Lucie Plant

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ENCLOSURE 1

Summary of changes to the Florida Power & Light Topical Quality Assurance Report (FPL TQAR 1-76A) since June 1999.

1. Table of Contents (Each Revision)

   The Table of Contents has been updated at each revision of the TQAR to reflect the most recent revision of all documents within the TQAR.

2. NRC LETTER & CERTIFICATE (Rev. 8/10/94 to Rev. 8/26/99)

   Incorporate the Quality Assurance Program Approval for Radioactive Material Packages No. 0169, Revision No. 6, which satisfies the requirements of 10 CFR Part 71.101(f) for a Quality Assurance Program approved by the Commission.

3. TQR 1.0: ORGANIZATION (Rev. 39 to Rev. 40)

   Power Delivery Business Unit's name changed to Power Systems. Protection and Control Department combined with Substation Department—name changed to Station Area Operations.

   Receiving Inspection moved from Quality Assurance to Nuclear Materials Management.

4. TQR 1.0: ORGANIZATION (Rev. 40 to Rev. 41)

   Organization Change. Moving NDE for acceptance of repairs and modifications from Quality Assurance to Engineering.

5. TQR 1.0: ORGANIZATION (Rev. 41 to Rev. 42)

   Depict new Integrated Supply Chain organization.

6. TQR 1.0: ORGANIZATION (Rev. 42 to Rev. 43)

   Change selected TQR references from the Technical Specifications to the FSAR for Turkey Point.

ENCLOSURE 1

7. TQR 1.0: ORGANIZATION (Rev. 43 to Rev. 44)

   Department name changed from Station Area Operations to Transmission Operations.

8. TQR 2.0: QUALITY ASSURANCE PROGRAM (Rev. 15 to Rev. 16)

   Support TQR 5.0 change which replaces QA/QC in-line review of certain on-site procedures with a periodic, random, and situational review. (Change incorporates existing indoctrination standards into the TQAR.) Reflects current practice.

9. TQR 4.0: PROCUREMENT DOCUMENT CONTROL (Rev. 10 to Rev. 11)

   Change title to "Integrated Supply Chain".

10. TQR 5.0: INSTRUCTION, PROCEDURES & DRAWINGS (Rev. 13 to Rev. 14)

    Replace QA/QC in-line review of certain on-site plant procedures with a periodic, random, and situational review.

11. TQR 7.0: CONTROL OF PURCHASED ITEMS & SERVICES (Rev. 10 to Rev. 11)

    Receiving Inspection moved from Quality Assurance to Nuclear Materials Management.

12. TQR 7.0: CONTROL OF PURCHASED ITEMS & SERVICES (Rev. 11 to Rev. 12)

    Change title to "Integrated Supply Chain".

13. TQR 8.0: IDENTIFICATION OF CONTROL OF MATERIAL, PARTS, & COMPONENTS (Rev. 4 to Rev. 5)

    Organization Change. Warehousing responsibilities transferred from plant to the Manager of Nuclear Procurement & Logistics.

ENCLOSURE 1

14. TQR 8.0: IDENTIFICATION OF CONTROL OF MATERIAL, PARTS, & COMPONENTS (Rev. 5 to Rev. 6)

    Change title to "Integrated Supply Chain".

15. TQR 9.0: CONTROL OF SPECIAL PROCESSES (Rev. 13 to Rev. 14)

    Organization Change. Moving NDE for acceptance of repairs and modifications from Quality Assurance to Engineering.

16. TQR 10.0: INSPECTION (Rev. 12 to Rev. 13)

    Power Delivery Business Unit's name changed to Power Systems. Protection and Control Department combined with Substation Department--name changed to Station Area Operations.

17. TQR 10.0: INSPECTION (Rev. 13 to Rev. 14)

    Organization Change. Moving NDE for acceptance of repairs and modifications from Quality Assurance to Engineering.

18. TQR 10.0: INSPECTION (Rev. 14 to Rev. 15)

    Department name changed from Station Area Operations to Transmission Operations.

19. TQR 11.0: TEST CONTROL (Rev. 6 to Rev. 7)

    Power Delivery Business Unit's name changed to Power Systems. Protection and Control Department combined with Substation Department--name changed to Station Area Operations.

20. TQR 11.0: TEST CONTROL (Rev. 7 to Rev. 8)

    Department name changed from Station Area Operations to Transmission Operations.

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ENCLOSURE 1

21. TQR 12.0: CONTROL OF MEASURING & TEST EQUIPMENT (Rev. 5 to Rev. 6)

    Power Delivery Business Unit's name changed to Power Systems. Protection and Control Department combined with Substation Department--name changed to Station Area Operations.

22. TQR 12.0: CONTROL OF MEASURING & TEST EQUIPMENT (Rev. 6 to Rev. 7)

    Department name changed from Station Area Operations to Transmission Operations.

23. TQR 13.0: HANDLING, STORAGE & SHIPPING (Rev. 10 to Rev. 11)

    Organization Change. Warehousing responsibilities transferred from plant to the Manager of Nuclear Procurement & Logistics.

24. TQR 13.0: HANDLING, STORAGE & SHIPPING (Rev. 11 to Rev. 12)

    Change title to "Integrated Supply Chain".

25. TQR 16.0: CORRECTIVE ACTION (Rev. 13 to Rev. 14)

    Change selected TQR references from the Technical Specifications to the FSAR for Turkey Point.

26. TQR 18.0: AUDITS (Rev. 9 to Rev. 10)

    Change selected TQR references from the Technical Specifications to the FSAR for Turkey Point.

27. APPENDIX A, FIGURE 1-1: ORGANIZATION & FIGURES (Rev. 31 to Rev. 32)

    Power Delivery Business Unit's name changed to Power Systems. Protection and Control Department combined with Substation Department--name changed to Station Area Operations.

    Title clarification of Manager, Materials Management to Manager, Nuclear Materials Management.

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ENCLOSURE 1

28. APPENDIX A, FIGURE 1-1: ORGANIZATION & FIGURES (Rev. 32 to Rev. 33)

    Revise the organization for Integrated Supply Chain.

    Reflect reporting changes as announced by the Chairman and Chief Executive Officer.

29. APPENDIX A, FIGURE 1-1: ORGANIZATION & FIGURES (Rev. 33 to Rev. 34)

    Department name changed from Station Area Operations to Transmission Operations.

30. APPENDIX A, FIGURE 1-2: ORGANIZATION & FIGURES (Rev. 15 to Rev. 16)

    Title clarification of Manager, Materials Management to Manager, Nuclear Materials Management.

31. APPENDIX A, FIGURE 1-2: ORGANIZATION & FIGURES (Rev. 16 to Rev. 17)

    To allow flexibility of the Reactor Engineers and STAs to report to the site Engineering Manager, without necessarily reporting directly to the Operations Support Engineering Supervisor.

32. APPENDIX A, FIGURE 1-3: ORGANIZATION & FIGURES (Rev. 15 to Rev. 16)

    Title clarification of Manager, Materials Management to Manager, Nuclear Materials Management.

33. APPENDIX A, FIGURE 1-3: ORGANIZATION & FIGURES (Rev. 16 to Rev. 17)

    Eliminate the Rotating Maintenance Supervisor position.

34. APPENDIX A, FIGURE 1-3: ORGANIZATION & FIGURES (Rev. 17 to Rev. 18)

    To allow flexibility of the Reactor Engineers and STAs to report to the site Engineering Manager, without necessarily reporting directly to the Operations Support Engineering Supervisor.

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ENCLOSURE 1

35. APPENDIX C: BASELINE DOCUMENT MATRIX (Rev. 17 to Rev. 18)

    Change selected TQR references from the Technical Specifications to the FSAR for Turkey Point.

36. APPENDIX C: BASELINE DOCUMENT MATRIX (Rev. 18 to Rev. 19)

    Remove reference to "Draft Rev." on title of column (Page 2) "Draft Rev. Issued Date" to avoid confusion of whether documents are in draft or issued status.

Florida Power & Light
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ENCLOSURE 2
(Red-Lined TQAR)

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

August 26, 1999

Mr. Robert Acosta
Director - Nuclear Assurance
Florida Power & Light Company
P. O. Box 14000
Juno Beach, FL 33408-0420

Dear Mr. Acosta:

Enclosed is Quality Assurance Program Approval for Radioactive Material Packages No. 0169, Revision No. 6. This Approval satisfies the requirements of 10 CFR § 71.12(b) and 71.101(f) for a Quality Assurance Program approved by the Commission.

Please note the conditions in the Approval.

This Approval will remain in effect until the expiration date, indicated in Block No. 3. Termination of your materials license does not cause this Approval to be automatically terminated. If you wish to renew, amend, or terminate this Approval, please request it in writing.

This letter also serves as a reminder that if you are using or planning to use an NRC-approved packaging, you must be registered for use of that packaging with NRC. Registration for use of NRC-approved packagings should be made pursuant to 10 CFR § 71.12(c)(3).

Sincerely,

Patricia L. Eng, Section Chief
Transportation and Storage Safety
and Inspection Section
Spent Fuel Project Office
Office of Nuclear Material Safety
and Safeguards

Docket No. 71-0169

Enclosure: As stated

NRC FORM 311
(9-1997)

U.S. NUCLEAR REGULATORY COMMISSION

QUALITY ASSURANCE PROGRAM APPROVAL
FOR RADIOACTIVE MATERIAL PACKAGES

1. APPROVAL NUMBER: 0169
REVISION NUMBER: 6

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and Title 10, Code of Federal Regulations, Chapter 1, Part 71, and in reliance on statements and representations heretofore made in Item 5 by the person named in Item 2, the Quality Assurance Program identified in Item 5 is hereby approved. This approval is issued to satisfy the requirements of Section 71.101 of 10 CFR Part 71. This approval is subject to all applicable rules, regulations, and orders of the U.S. Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

2. NAME
Florida Power & Light Company

STREET ADDRESS
P. O. Box 14000

CITY
Juno Beach

STATE: FL
ZIP CODE: 33408-0420

3. EXPIRATION DATE
August 31, 2004

4. DOCKET NUMBER
71-0169

5. QUALITY ASSURANCE PROGRAM APPLICATION DATE(S)
July 26, 1999

6. CONDITIONS

1. **Activities conducted with regard to transportation packagings under applicable criteria of Appendix B to 10 CFR Part 50 authorized by this approval: procurement, maintenance, repair, and use. All other activities (i.e., design, fabrication, assembly, and modification) shall be satisfied by obtaining certifications from packaging suppliers that these activities were conducted in accordance with an NRC-approved Quality Assurance Program. It shall remain the responsibility of the Quality Assurance Program holder that all transportation activities meet the requirements of 10 CFR § 71.101.**

2. **Records shall be maintained in accordance with the provisions of 10 CFR Part 71. Specifically:**

   a. **Records of each shipment of licensed material shall be maintained for three years after that shipment [10 CFR § 71.91(a)].**

   b. **Records providing evidence of packaging quality shall be maintained for three years after the life of the packaging [10 CFR § 71.91(c)].**

   c. **Records describing activities affecting packaging quality shall be maintained for three years after this Quality Assurance Program Approval is terminated (10 CFR § 71.135).**

3. **Planned and periodic audits of all aspects of the Quality Assurance Program shall be conducted in accordance with written procedures or checklists, by appropriately trained personnel not having direct responsibility in the areas being audited, in accordance with 10 CFR § 71.137.**

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

SIGNATURE

DATE
26 Aug 99

PATRICIA L. ENG, CHIEF
TRANSPORTATION AND STORAGE INSPECTION SECTION
SPENT FUEL PROJECT OFFICE
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

1.1 GENERAL REQUIREMENTS

The Florida Power & Light (FPL) organizational structure shall be defined such that the responsibilities for establishment and implementation of the Quality Assurance Program are clearly identified. The authority and duties of individuals and organizations performing quality assurance and quality control functions shall be described, and shall illustrate the organizational independence and authority necessary to identify problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. In addition, the description shall illustrate that persons or groups responsible for verifying the correct performance of an activity are independent of the person or groups responsible for performing the activity.

1.2 IMPLEMENTATION

The FPL Chairman of the Board and Chief Executive Officer is ultimately responsible for the execution of the Quality Assurance Program for FPL nuclear power plants. The authority for developing and verifying execution of the program is delegated to the President Nuclear Division and the Director Nuclear Assurance. The reporting relationship of each department involved with the Quality Assurance Program is shown in Appendix A.

To provide for a review and evaluation of Quality Assurance Program policies and activities, the President Nuclear Division has established the Company Nuclear Review Board (CNRB). This organization's responsibilities are defined in Section 1.3.1.

In addition, a Quality Assurance Program Review Committee (QAPRC) has been established to review changes to the Quality Assurance Program and to provide an interface for quality matters in each department affecting quality. The QAPRC is an interdepartmental organization with the responsibility to review and resolve recommended changes to the Quality Assurance Program. This committee is administered by the Quality Assurance Performance Assessment group. Quality Assurance Program changes reviewed by the QAPRC are reviewed and signed by the affected department heads.

A Quality Assurance Program Review Committee (QAPRC) Member shall be designated by the head of each department or organization. The QAPRC Member is the prime interface for coordination of quality matters within the member's department, with the Quality Assurance Department, and with other departments.

The head of each department or organization performing activities affecting quality is responsible for: a) identifying those activities within the organization which affect quality as defined by the Quality Assurance Program; b) establishing and clearly defining the duties and responsibilities of personnel within his organization who execute those activities affecting quality; and c) planning, selecting, and training personnel to meet the requirements of the Quality Assurance Program. The responsibility, authority, and organizational relationship for performing activities affecting quality within each organization shall be established and delineated in organizational charts and written job or functional descriptions.

Activities affecting quality may be performed by FPL or be contracted. Should any of these functions be contracted, the contractor may perform the activities under his own Quality Assurance Program, which must have prior approval by FPL Quality Assurance, or the contractor may directly adopt the requirements of the FPL Quality Assurance Manual. If the contractor implements the Quality Control function directly to the FPL Quality Assurance Manual requirements, the contractor's Quality Control Supervisor shall have the authority and freedom to administer the Quality Control program.

1.3 RESPONSIBILITIES

The organization charts in Appendix A illustrate the lines of authority and areas of responsibility for each of the organizations that are involved in activities affecting quality. Below are listed the departments and organizations that have quality assurance responsibilities. Organizational responsibilities for implementation of the Quality Assurance Program are described in the Topical Quality Requirements (TQRs).

1.3.1	Nuclear Division	1.3.2	Support Departments
1.3.1.1	Plant Vice Presidents	1.3.2.1	Corporate Records
1.3.1.2	Administrative Support and Special Projects	1.3.2.2	Environmental Services
1.3.1.3	Nuclear Engineering Systems	1.3.2.3	Protection & Control
1.3.1.4	Nuclear Information Systems	1.3.2.4	Information Management
1.3.1.5	Nuclear Assurance		
1.3.1.6	Nuclear Business Services		
1.3.1.7	**Nuclear Procurement & Logistics (R984A)**		

1.3.1 Nuclear Division

Throughout plant life, the Nuclear Division maintains control of and responsibility for nuclear power plant design, preoperational and start-up testing, operation, maintenance, refueling, and modification of the plant in accordance with written and approved procedures.

The President Nuclear Division has overall responsibility for the Nuclear Division's activities including corporate responsibility for overall plant nuclear safety. Reporting to the President Nuclear Division are: the Vice President - Turkey Point Plant, Vice President - St. Lucie Plant, Director Nuclear Assurance, Vice President Nuclear Engineering, Manager Administrative Support and Special Projects, the Director Nuclear Business Services, and Manager Nuclear Information Systems**, and Manager Nuclear Procurement & Logistics**. **(R984B)**

The Company Nuclear Review Board (CNRB), reporting to the President Nuclear Division, is comprised of executive level members of management with responsibilities for the execution of the Quality Assurance Program. The CNRB reviews, or directs the performance of reviews of, activities concerning the technical aspects of the operating nuclear power plant insofar as they impact plant safety, the health and safety of the public, and laws, regulations and licensing commitments. In addition, audits of these areas are performed under the cognizance of the CNRB.

The CNRB composition is described in Section 6.0 of each facility's Technical Specifications. Subjects within the purview of the CNRB are listed in the appropriate plant Technical Specifications. The CNRB has the authority to carry out its responsibilities by way of written action letters, verbal directions, meeting minutes or appointed subcommittees. Where necessary, the CNRB may use consulting services to perform required reviews.

The CNRB is responsible for reviewing and evaluating Quality Assurance Program policies and activities. Quality Assurance Program status reports shall be periodically given by the Quality Assurance Department.

CNRB meetings shall be held by the Chairman to keep members apprised of conditions including significant problems that require management attention. Periodic audits of the Quality Assurance Department shall be performed by a team independent of the Quality Assurance Department. The results of this audit are presented to the Director Nuclear Assurance and the CNRB.

1.3.1.1 Plant Vice Presidents

The Vice President - St. Lucie Plant and Vice President - Turkey Point Plant are accountable for the operation, maintenance, and modification of their respective nuclear plant, as well as the selection, development and direction of the assigned staff. They will act as liaison between the plants and corporate headquarters, and are accountable for ensuring that company policies and procedures are properly implemented and continued at the nuclear site, ~~including procurement and control of material~~ **(R984A) including control of material (R984B)**. The Plant Vice President has overall responsibility for implementation of the Environmental Protection Plans at their respective sites.

Other responsibilities of the site Vice President include the following:

Information Services (PSL Only)

- Configuration management.

Nuclear Training

- Preparation of policy documents regarding nuclear training;

- Support to secure the necessary resources to ensure that site personnel are adequately trained. They must have adequate technical and job related skills to provide safe and efficient operation while complying with NRC requirements.

Nuclear Security (PSL)/Protection Services (PTN)

- Coordinate with the opposite plant site for overall development and implementation of the FPL Nuclear Security program.

Nuclear Business Systems

- ~~Coordinating contract activities.~~

- ~~Reviewing contracts to assure that technical and quality requirements developed by others are incorporated into the procurement documents which it authorizes.~~ **(R984A)**

- Configuration Management (PTN Only)

Nuclear Licensing

- Maintenance of the operating license;
- Interface with the NRC;
- Resolution of NRC safety and regulatory issues;
- Administering the Operating Experience and Feedback System.
- Advising senior management on a regular basis of important developments in licensing areas which could significantly affect the Nuclear Division.

~~Nuclear Materials Management~~

- ~~Negotiation, generation, issuance of procurement documents for required items and services supporting the operation, licensing, maintenance, notification, and inspection of FPL nuclear plants, and for materials and equipment to support Nuclear Division staff;~~

- ~~Reviewing procurement documents to assure that technical and quality requirements developed by others are incorporated into the procurement documents which it authorizes.~~ **(R984A)**

The organization of Turkey Point Plant and St. Lucie Plant is shown in Appendix A.

The Plant General Manager - PSL and Plant General Manager - PTN, through the respective Plant Vice President, are responsible for the safe operation of the nuclear plant. The Plant General Managers have control of the onsite resources necessary for the safe operation and maintenance regardless of organizational reporting.

The Plant Nuclear Safety Committee (PNSC) at Turkey Point Plant and the Facility Review Group (FRG) at the St. Lucie Plant are comprised of key plant management and staff personnel as described in the plant Technical Specifications. The PNSC/FRG serves the plant manager in a technical advisory capacity for the review of all safety-related procedures and activities that impact plant safety and the facility operating license.

1.3.1.2 Administrative Support and Special Projects

The Manager Administrative Support and Special Projects is responsible for providing administrative support to Nuclear Division Executive Management and for management of Special Projects. These include:

- Directing project teams to address Nuclear Division issues;
- Providing Nuclear Division interface with INPO and NEI;
- Assisting in the performance of self assessment and benchmarking activities.

1.3.1.3 Nuclear Engineering

The Vice President Nuclear Engineering is responsible for nuclear plant design and engineering support.

The Nuclear Engineering organization is shown in Appendix A.

a. Nuclear Engineering

Nuclear Engineering includes personnel located at both nuclear sites and at the corporate office. Nuclear Engineering performs design-related activities and delegates design-related activities to qualified contractors. For activities performed by Nuclear Engineering, the work is governed by FPL's Quality Assurance Program, and Nuclear Engineering is responsible for approval of the design output.

Delegated activities are performed in accordance with an FPL approved Quality Assurance Program and the contractor is responsible for approval of design output. Nuclear Engineering is responsible for defining the scope of delegated activities and the responsibilities of the contractor. Prior to the release of design outputs by contractor organizations, Nuclear Engineering ensures that the contractor is technically qualified to perform the design-related activity.

The Manager - Turkey Point Engineering and the Manager - St. Lucie Engineering provide on-site engineering support and direct the engineering aspects of all FPL nuclear power plant projects during construction and operation to assure efficient, economical and reliable power plant design, conformance with engineering schedules and budgets and compliance with regulatory requirements.

Nuclear Engineering is responsible for:

- power plant design related aspects of the FPL Quality Assurance Program throughout all phases of plant life;
- development and maintenance of the design control program governing design-related activities performed by Nuclear Engineering and for providing technical support to the Quality Assurance Department for assessing the adequacy, implementation and effectiveness of contractor design control programs;
- the preparation, revision, approval and distribution of plant design records that are identified to be maintained as "as -constructed" drawings during plant operation;
- the development, control, and performance of certain aspects of items and services procurement, including establishment of procurement standards, the technical evaluation, equivalency evaluation, and commercial grade dedication of replacement parts/components for nuclear plants;
- review of the technical and quality requirements in procurement requisitioning documents and changes thereto for safety related and quality related items and services, as well as configuration control activities for controlled design documentation associated with procurement. The review shall be performed by individuals other than the document originator;
- **performing Nondestructive Examination (NDE) for inservice inspection and acceptance of repairs and modifications; (R984A)**
- **NDE Level III services including technical direction and monitoring of NDE activities performed at the plant sites (PTN and PSL). (R984B)**
- plant license renewal;
- environmental issues;
- FPL liaison in matters of high level waste disposal.

Aspects of the above activities are performed by the Juno Beach Engineering organization as determined by the Vice President Nuclear Engineering.

b. Nuclear Fuel

The Manager Nuclear Fuel is responsible for nuclear fuel engineering and procurement activities including the following:

- assuring that technical and quality requirements (including inputs from other FPL departments) are incorporated in fuel contracts and letters of authorization;
- administering and managing contracts for nuclear fuel and related services to assure that technical and quality obligations are met, and serving as FPL liaison in all matters of nuclear fuel and fuel-related contracts;
- administering and managing spent fuel disposal contracts with Department of Energy and serving as FPL liaison in matters of nuclear fuel;
- all fuel related design, analyses, reviews, and technical assistance necessary to ensure the safe, reliable, and economic operation of the nuclear plants;
- the development and/or review of fuel and nuclear physics design;
- implementing and maintaining the FPL corporate nuclear material accountability program as described in Nuclear Fuel Standards;
- providing support to the Quality Assurance Department for their auditing of nuclear fuel design and fuel assembly manufacturing;
- performing audits and coordinating accountability reporting on all nuclear fuel.

c. Component Support and Inspections

- The Manager Component Support and Inspections is responsible for providing support to the plants as follows:
- ~~**provide NDE Level III services including technical direction and monitoring of NDE activities performed at the plant sites (PTN and PSL).**~~ **(R984B)**

- providing technical support of activities associated with component reliability, materials evaluations, inspections, corrosion protection, non-destructive examination, and ASME Section XI implementation/problem resolution for nuclear plant components;

- providing specific component expertise, metallurgical support, and non-destructive examination and inspections;

- establishing the FPL Welding Program to meet the requirements of the Quality Assurance Program and applicable codes and standards;

- developing, maintaining, and controlling the procedures and instructions to implement the FPL Welding Program; and

- originating and qualifying welding procedure specifications.

d. Reliability and Risk Assessment

The Supervisor of Reliability and Risk Assessment is responsible for providing support to the plants as follows:

- prepare and maintain Probabilistic Safety Assessment (PSA) for each plant;

- perform Risk Assessments in support of Maintenance activities;

- perform Risk Assessments in support of the NRC Maintenance Rule.

1.3.1.4 Nuclear Information Systems

- The Manager, Nuclear Information Systems is responsible for the identification, design, development, implementation, on-going maintenance and control of all Nuclear Division information system software (excluding process software). This includes:

- Assuring compliance with FPL software QA commitments by ensuring that appropriate controls are applied;

- Identifying applicable software in a Computer Software Index (CSI)

- Infrastructure planning, operations and maintenance;

- Coordinating and directing computer hardware and telecommunication planning and control.

- Formal approval of all hardware or operating system software changes or resolutions to problems occurring on computer systems under the control of Information Management.

1.3.1.5 Nuclear Assurance

The Director Nuclear Assurance is responsible for the selection, technical direction, administrative control (e.g. performance appraisal, salary review, hire/fire, position assignment) staffing, training and development of personnel required for supervisory and operating continuity of the Quality Assurance Department, Nuclear Safety Speakout, and the CNRB Subcommittee. The Director Nuclear Assurance serves as the CNRB Chairman. The Director Nuclear Assurance also initiates QA Program policy changes when necessary. In addition, the Director Nuclear Assurance is responsible for selecting a team independent of the Quality Assurance Department to perform periodic audits of the Quality Assurance Department. The results of these audits are presented to the Director Nuclear Assurance and the Company Nuclear Review Board (CNRB).

The Nuclear Assurance organization is shown in Appendix A.

a. Nuclear Safety Speakout

The Nuclear Safety Speakout Program provides a forum for employees and contractors to communicate their concerns to FPL. Concerns are documented, investigated and corrective actions are taken when necessary. The program offers confidentiality.

b. Quality Assurance Department

The Quality Assurance Department is responsible for administering the FPL Quality Assurance Program. This includes developing and verifying implementation of corporate policies, plans, requirements, and procedures affecting quality. The Quality Assurance Department retains responsibility for delegated portions of the Quality Assurance Program by performing initial evaluation and subsequent periodic audits of the contractors' Quality Assurance Programs. The Quality Assurance Program responsibility further extends to the performance of audits within the Company to assure management that the established requirements and procedures are being implemented, and that the Program complies with the baseline document requirements.

The organizational freedom of the Quality Assurance function is accomplished through the corporate structure, illustrated in Appendix A, which provides independence from those departments responsible for design, procurement, engineering, construction and operation. With quality assurance as its sole function the Quality Assurance Department, both on-site and off--site, is completely free from the cost and scheduling pressures of design, procurement, construction and operation. The Quality Assurance Department has the freedom and authority to: a) identify quality problems; b) initiate, recommend or provide corrective action; c) verify implementation of the corrective action; and d) recommend the stoppage of work or operations adverse to quality, when necessary. The QA Supervisor Performance Assessment, QA Supervisor Procurement Quality, Site Quality Manager - St. Lucie, and Site Quality Manager - Turkey Point report administratively and functionally to the Director Nuclear Assurance. These reporting relationships assure that the Quality Assurance Department has direct access to the levels of management necessary to assure effective implementation of the Quality Assurance Program.

The duties, responsibilities, and authorities of each Quality Assurance group are described in the sections which follow.

1) Performance Assessment

The QA Supervisor Performance Assessment directs and administers the Corporate Quality Assurance Program assuring compliance with the baseline documents listed in Appendix C of this Topical Quality Assurance Report. Quality Performance Assessment activities include the following:

- develop and maintain the corporate Quality Assurance Manual, including the administration of the Quality Assurance Program Review Committee (QAPRC);
- develop and implement a Quality Assurance indoctrination program for FPL personnel;
- prepare reports on Quality Assurance Program activities for review by the CNRB;
- plan, coordinate and implement a comprehensive system of periodic internal audits with support from the other Quality Assurance groups, when necessary;

- perform periodic activity audits of FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

- ~~provide NDE Level III services including technical direction and monitoring of NDE activities performed by Quality Control at the plant sites (PTN and PSL).~~ **(R984A)**

2) Procurement Quality

The QA Supervisor Procurement Quality directs and administers the Procurement Quality program in support of both nuclear plants. Procurement Quality activities include the following:

- perform appropriate surveillance of hardware during manufacture;

- develop and implement a program for auditing of supplier Quality Assurance/Quality Control programs including Architect Engineer/Nuclear Steam Supply System Suppliers;

- assist other FPL departments in the identification of quality problems associated with procurement and storage; initiate, recommend, or provide solution; and verify implementation of solutions;

- maintain the Quality Assurance Department list of approved suppliers;

For purchased items and services, the responsibility of this group extends through receipt of shipment or performance of contract.

3) Site Quality Assurance

Turkey Point Nuclear (PTN) and St. Lucie (PSL)

Quality Assurance activities at the plant sites (PTN and PSL) are accomplished by the respective site Quality Assurance groups, reporting to the Site Quality Manager. The Site Quality Manager has responsibility for on-site development and implementation of the Quality Assurance Program, including the following:

- coordinate the development and implementation of quality assurance policies, plans, requirements, and procedures at the plant site;

- perform audits, assessments and other observations as specified in procedures and instructions to verify compliance with Quality Assurance Program commitments;

- perform periodic activity audits of site generated FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

- recommend stoppage of work or operations adverse to quality at the plant site in accordance with the appropriate instructions;

- review and comment on Quality Instructions or equivalent quality administrative procedures prior to issue, with respect to the requirements of the FPL Quality Assurance Program, the applicable Final Safety Analysis Report, and the applicable Technical Specifications;

- perform audits of the architect engineer and Nuclear Steam Supply System suppliers both on-site and off-site, in conjunction with the Procurement Quality group.

The interface with the Procurement Quality group ends with the receipt of a shipment of nuclear safety-related equipment at the plant site. The Quality Assurance program for the shipment is then within the purview of the Site Quality Assurance group.

The Quality Manager - Turkey Point and Quality Manager - St. Lucie are additionally responsible for the establishment and implementation of quality control aspects of the Quality Assurance Program at the plant site **with the exceptions of receipt inspection of purchased items ~~and NDE for acceptance of repairs and modifications~~. (R984C).** Reporting directly to the Site Quality Manager are the Quality Control Supervisors who have the authority and freedom to administer the Quality Control program and, when necessary, to stop activities adverse to quality. The Quality Control Supervisors and personnel performing Quality Control inspection functions are required to be independent of groups or persons performing activities that they may be required to verify or inspect. **(R984A)**

Quality Control responsibilities include:

- inspection, monitoring, surveillance, and review of plant activities to verify compliance with the provision of the facility operating license and the Quality Assurance Manual;

- acceptance of the installed items;

1.3.1.6 Nuclear Business Services

The Director Business Services is responsible for Nuclear Division business and financial planning and analysis and nuclear plant support in the areas of document control and QA records management, security, emergency preparedness, and radiological services.

Nuclear Business Services is shown in Appendix A.

1.3.1.7 Nuclear Procurement & Logistics

The Manager of Nuclear Procurement & Logistics is responsible for:

- **Coordinating contract activities.**
- **Negotiating, generating, issuing procurement documents for required items and services supporting the operation, licensing, maintenance, notification, and inspection of FPL nuclear plants, and for materials and equipment to support Nuclear Division staff.**
- **Reviewing procurement documents to assure that technical and quality requirements developed by others are incorporated into the procurement documents which it authorizes.**
- **Performing receipt inspection to verify that purchased items comply with procurement document requirements. (R984C)**
- **Controlling materials received at each nuclear plant site in accordance with company policies and procedures. (R984A)**

1.3.2 Support Departments

Providing support activities for the Nuclear Division are Corporate Records, Environmental Affairs, Protection & Control Systems, and Information Management. The reporting relationship of each department is described in the following sections and is shown in Appendix A.

1.3.2.1 Corporate Records

The Supervisor Corporate Records is responsible for:

- storage, retrieval and control of Quality Assurance records received from other departments;
- assisting with the development and implementation of records and micrographics programs;
- maintaining a QARSET approved storage facility;
- serving as the Records Official.

1.3.2.1.a The Records Official, reporting to the General Counsel and Secretary is responsible for:

- ensuring the Quality Assurance records storage and preservation activities are in accordance with applicable recordkeeping requirements;

- locating acceptable record storage areas when requested;

- leading the evaluation of specially designated QARSET approved storage facilities, maintaining records of this evaluation, and establishing schedules to assure that re-evaluations are performed every two (2) years.

1.3.2.2 Environmental Services

Environmental Services is responsible for obtaining the federal and state environmental permits required for FPL facilities and operations. Environmental Services is also responsible for providing technical support on environmental regulatory requirements, including regulatory development, enforcement actions, compliance with environmental requirements and environmental assessments and clean-ups at all company facilities, as well as technical support and/or advice on non-radiological environmental monitoring (federal and state) programs at the nuclear power plant sites.

The Site Vice President has overall responsibility for implementation of the Environmental Protection Plans (EPPs) at nuclear power plant sites.

The Environmental Services Department through its functional areas is responsible for providing technical support and/or advice on non-radiological environmental monitoring programs and oversight of other requirements related to the Environmental Protection Plans. The Department provides review of proposed changes to the Environmental Protection Plans, review of plant changes, tests or experiments and review of other plant activities which may be subject to environmental regulations to ensure their compliance.

The Department provides information as necessary to the CNRB Chairman on environmental matters for which requirements are included in Environmental Protection Plans.

1.3.2.3 Protection & Control Systems

The Director of Protection & Control Systems reports to the Vice President of Power Delivery.

Protection & Control Systems is responsible for:

- test, calibration and maintenance of certain high voltage electrical protective relays for safety-related systems of the nuclear plant;
- final wiring connection checks;
- preoperational check-out and test of system protection devices;
- providing inspection of equipment under their cognizance;
- providing certain setpoint and checkpoint values for protective devices.

1.3.2.4 Information Management

The Corporate Information Management organization is shown in Appendix A.

Information Management is responsible for ensuring the integrity of the operating environment and the applications used by the Nuclear Division. The Director of Information Management Operations and the Manager of IM - Planning and Architecture report to the Vice President of Information Management.

1.3.2.4.a The Director of Information Management Operations is responsible for:

- the installation and maintenance of operating system software and the operation of computer hardware for FPL's corporate computer system;
- executing software production release and change control activities.

1.3.2.4.b The Manager of IM - Planning and Architecture is responsible for administering physical databases and providing on-going technical support.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

1.1 GENERAL REQUIREMENTS

The Florida Power & Light (FPL) organizational structure shall be defined such that the responsibilities for establishment and implementation of the Quality Assurance Program are clearly identified. The authority and duties of individuals and organizations performing quality assurance and quality control functions shall be described, and shall illustrate the organizational independence and authority necessary to identify problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. In addition, the description shall illustrate that persons or groups responsible for verifying the correct performance of an activity are independent of the person or groups responsible for performing the activity.

1.2 IMPLEMENTATION

The FPL Chairman of the Board and Chief Executive Officer is ultimately responsible for the execution of the Quality Assurance Program for FPL nuclear power plants. The authority for developing and verifying execution of the program is delegated to the President Nuclear Division and the Director Nuclear Assurance. The reporting relationship of each department involved with the Quality Assurance Program is shown in Appendix A.

To provide for a review and evaluation of Quality Assurance Program policies and activities, the President Nuclear Division has established the Company Nuclear Review Board (CNRB). This organization's responsibilities are defined in Section 1.3.1.

In addition, a Quality Assurance Program Review Committee (QAPRC) has been established to review changes to the Quality Assurance Program and to provide an interface for quality matters in each department affecting quality. The QAPRC is an interdepartmental organization with the responsibility to review and resolve recommended changes to the Quality Assurance Program. This committee is administered by the Quality Assurance Performance Assessment group. Quality Assurance Program changes reviewed by the QAPRC are reviewed and signed by the affected department heads.

A Quality Assurance Program Review Committee (QAPRC) Member shall be designated by the head of each department or organization. The QAPRC Member is the prime interface for coordination of quality matters within the member's department, with the Quality Assurance Department, and with other departments.

The head of each department or organization performing activities affecting quality is responsible for: a) identifying those activities within the organization which affect quality as defined by the Quality Assurance Program; b) establishing and clearly defining the duties and responsibilities of personnel within his organization who execute those activities affecting quality; and c) planning, selecting, and training personnel to meet the requirements of the Quality Assurance Program. The responsibility, authority, and organizational relationship for performing activities affecting quality within each organization shall be established and delineated in organizational charts and written job or functional descriptions.

Activities affecting quality may be performed by FPL or be contracted. Should any of these functions be contracted, the contractor may perform the activities under his own Quality Assurance Program, which must have prior approval by FPL Quality Assurance, or the contractor may directly adopt the requirements of the FPL Quality Assurance Manual. If the contractor implements the Quality Control function directly to the FPL Quality Assurance Manual requirements, the contractor's Quality Control Supervisor shall have the authority and freedom to administer the Quality Control program.

1.3 RESPONSIBILITIES

The organization charts in Appendix A illustrate the lines of authority and areas of responsibility for each of the organizations that are involved in activities affecting quality. Below are listed the departments and organizations that have quality assurance responsibilities. Organizational responsibilities for implementation of the Quality Assurance Program are described in the Topical Quality Requirements (TQRs).

1.3.1	Nuclear Division	1.3.2	Support Departments
1.3.1.1	Plant Vice Presidents	1.3.2.1	Corporate Records
1.3.1.2	Administrative Support and Special Projects	1.3.2.2	Environmental Services
1.3.1.3	Nuclear Engineering	1.3.2.3	Station Area Operations
1.3.1.4	Nuclear Information Systems	1.3.2.4	Information Management
1.3.1.5	Nuclear Assurance		
1.3.1.6	Nuclear Business Services		
1.3.1.7	Nuclear Procurement & Logistics		

1.3.1 Nuclear Division

Throughout plant life, the Nuclear Division maintains control of and responsibility for nuclear power plant design, preoperational and start-up testing, operation, maintenance, refueling, and modification of the plant in accordance with written and approved procedures.

The President Nuclear Division has overall responsibility for the Nuclear Division's activities including corporate responsibility for overall plant nuclear safety. Reporting to the President Nuclear Division are: the Vice President - Turkey Point Plant, Vice President - St. Lucie Plant, Director Nuclear Assurance, Vice President Nuclear Engineering, Manager Administrative Support and Special Projects, the Director Nuclear Business Services, Manager Nuclear Information Systems, and Manager Nuclear Procurement & Logistics.

The Company Nuclear Review Board (CNRB), reporting to the President Nuclear Division, is comprised of executive level members of management with responsibilities for the execution of the Quality Assurance Program. The CNRB reviews, or directs the performance of reviews of, activities concerning the technical aspects of the operating nuclear power plant insofar as they impact plant safety, the health and safety of the public, and laws, regulations and licensing commitments. In addition, audits of these areas are performed under the cognizance of the CNRB.

The CNRB composition is described in Section 6.0 of each facility's Technical Specifications. Subjects within the purview of the CNRB are listed in the appropriate plant Technical Specifications. The CNRB has the authority to carry out its responsibilities by way of written action letters, verbal directions, meeting minutes or appointed subcommittees. Where necessary, the CNRB may use consulting services to perform required reviews.

The CNRB is responsible for reviewing and evaluating Quality Assurance Program policies and activities. Quality Assurance Program status reports shall be periodically given by the Quality Assurance Department.

CNRB meetings shall be held by the Chairman to keep members apprised of conditions including significant problems that require management attention. Periodic audits of the Quality Assurance Department shall be performed by a team independent of the Quality Assurance Department. The results of this audit are presented to the Director Nuclear Assurance and the CNRB.

1.3.1.1 Plant Vice Presidents

The Vice President - St. Lucie Plant and Vice President - Turkey Point Plant are accountable for the operation, maintenance, and modification of their respective nuclear plant, as well as the selection, development and direction of the assigned staff. They will act as liaison between the plants and corporate headquarters, and are accountable for ensuring that company policies and procedures are properly implemented and continued at the nuclear site, including control of material. The Plant Vice President has overall responsibility for implementation of the Environmental Protection Plans at their respective sites.

Other responsibilities of the site Vice President include the following:

Information Services (PSL Only)

- Configuration management.

Nuclear Training

- Preparation of policy documents regarding nuclear training;

- Support to secure the necessary resources to ensure that site personnel are adequately trained. They must have adequate technical and job related skills to provide safe and efficient operation while complying with NRC requirements.

Protection Services

- Coordinate with the opposite plant site for overall development and implementation of the FPL Nuclear Security program.

Nuclear Business Systems

- Configuration Management (PTN Only)

Nuclear Licensing

- Maintenance of the operating license;
- Interface with the NRC;
- Resolution of NRC safety and regulatory issues;
- Administering the Operating Experience and Feedback System.
- Advising senior management on a regular basis of important developments in licensing areas which could significantly affect the Nuclear Division.

The organization of Turkey Point Plant and St. Lucie Plant is shown in Appendix A.

The Plant General Manager - PSL and Plant General Manager - PTN, through the respective Plant Vice President, are responsible for the safe operation of the nuclear plant. The Plant General Managers have control of the onsite resources necessary for the safe operation and maintenance regardless of organizational reporting.

The Plant Nuclear Safety Committee (PNSC) at Turkey Point Plant and the Facility Review Group (FRG) at the St. Lucie Plant are comprised of key plant management and staff personnel as described in the plant Technical Specifications. The PNSC/FRG serves the plant manager in a technical advisory capacity for the review of all safety-related procedures and activities that impact plant safety and the facility operating license.

1.3.1.2 Administrative Support and Special Projects

The Manager Administrative Support and Special Projects is responsible for providing administrative support to Nuclear Division Executive Management and for management of Special Projects. These include:

- Directing project teams to address Nuclear Division issues;
- Providing Nuclear Division interface with INPO and NEI;
- Assisting in the performance of self assessment and benchmarking activities.

1.3.1.3 Nuclear Engineering

The Vice President Nuclear Engineering is responsible for nuclear plant design and engineering support.

The Nuclear Engineering organization is shown in Appendix A.

a. Nuclear Engineering

Nuclear Engineering includes personnel located at both nuclear sites and at the corporate office. Nuclear Engineering performs design-related activities and delegates design-related activities to qualified contractors. For activities performed by Nuclear Engineering, the work is governed by FPL's Quality Assurance Program, and Nuclear Engineering is responsible for approval of the design output.

Delegated activities are performed in accordance with an FPL approved Quality Assurance Program and the contractor is responsible for approval of design output. Nuclear Engineering is responsible for defining the scope of delegated activities and the responsibilities of the contractor. Prior to the release of design outputs by contractor organizations, Nuclear Engineering ensures that the contractor is technically qualified to perform the design-related activity.

The Manager - Turkey Point Engineering and the Manager - St. Lucie Engineering provide on-site engineering support and direct the engineering aspects of all FPL nuclear power plant projects during construction and operation to assure efficient, economical and reliable power plant design, conformance with engineering schedules and budgets and compliance with regulatory requirements.

Nuclear Engineering is responsible for:

- power plant design related aspects of the FPL Quality Assurance Program throughout all phases of plant life;

- development and maintenance of the design control program governing design-related activities performed by Nuclear Engineering and for providing technical support to the Quality Assurance Department for assessing the adequacy, implementation and effectiveness of contractor design control programs;

- the preparation, revision, approval and distribution of plant design records that are identified to be maintained as "as -constructed" drawings during plant operation;

- the development, control, and performance of certain aspects of items and services procurement, including establishment of procurement standards, the technical evaluation, equivalency evaluation, and commercial grade dedication of replacement parts/components for nuclear plants;

- review of the technical and quality requirements in procurement requisitioning documents and changes thereto for safety related and quality related items and services, as well as configuration control activities for controlled design documentation associated with procurement. The review shall be performed by individuals other than the document originator;

- **performing Nondestructive Examination (NDE) for inservice inspection and acceptance of repairs and modifications; (R1005)**

- **NDE Level III services including technical direction and monitoring of NDE activities performed at the plant sites (PTN and PSL). (R1005)**

- Plant license renewal;

- Environmental issues;

- FPL liaison in matters of high level waste disposal.

Aspects of the above activities are performed by the Juno Beach Engineering organization as determined by the Vice President Nuclear Engineering.

b. Nuclear Fuel

The Manager Nuclear Fuel is responsible for nuclear fuel engineering and procurement activities including the following:

- assuring that technical and quality requirements (including inputs from other FPL departments) are incorporated in fuel contracts and letters of authorization;

- administering and managing contracts for nuclear fuel and related services to assure that technical and quality obligations are met, and serving as FPL liaison in all matters of nuclear fuel and fuel-related contracts;

- administering and managing spent fuel disposal contracts with Department of Energy and serving as FPL liaison in matters of nuclear fuel;
- all fuel related design, analyses, reviews, and technical assistance necessary to ensure the safe, reliable, and economic operation of the nuclear plants;
- the development and/or review of fuel and nuclear physics design;
- implementing and maintaining the FPL corporate nuclear material accountability program as described in Nuclear Fuel Standards;
- providing support to the Quality Assurance Department for their auditing of nuclear fuel design and fuel assembly manufacturing;
- performing audits and coordinating accountability reporting on all nuclear fuel.

c. Component Support and Inspections

- The Manager Component Support and Inspections is responsible for providing support to the plants as follows:
- providing technical support of activities associated with component reliability, materials evaluations, inspections, corrosion protection, non-destructive examination, and ASME Section XI implementation/problem resolution for nuclear plant components;
- providing specific component expertise, metallurgical support, and non-destructive examination and inspections;
- establishing the FPL Welding Program to meet the requirements of the Quality Assurance Program and applicable codes and standards;
- developing, maintaining, and controlling the procedures and instructions to implement the FPL Welding Program; and
- originating and qualifying welding procedure specifications.

d. Reliability and Risk Assessment

The Supervisor of Reliability and Risk Assessment is responsible for providing support to the plants as follows:

- prepare and maintain Probabilistic Safety Assessment (PSA) for each plant;
- perform Risk Assessments in support of Maintenance activities;
- perform Risk Assessments in support of the NRC Maintenance Rule.

1.3.1.4 Nuclear Information Systems

The Manager, Nuclear Information Systems is responsible for the identification, design, development, implementation, on-going maintenance and control of all Nuclear Division information system software (excluding process software). This includes:

Assuring compliance with FPL software QA commitments by ensuring that appropriate controls are applied;

- Identifying applicable software in a Computer Software Index (CSI)
- Infrastructure planning, operations and maintenance;
- Coordinating and directing computer hardware and telecommunication planning and control.
- Formal approval of all hardware or operating system software changes or resolutions to problems occurring on computer systems under the control of Information Management.

1.3.1.5 Nuclear Assurance

The Director Nuclear Assurance is responsible for the selection, technical direction, administrative control (e.g. performance appraisal, salary review, hire/fire, position assignment) staffing, training and development of personnel required for supervisory and operating continuity of the Quality Assurance Department, Nuclear Safety Speakout, and the CNRB Subcommittee. The Director Nuclear Assurance serves as the CNRB Chairman. The Director Nuclear Assurance also initiates QA Program policy changes when necessary. In addition, the Director Nuclear Assurance is responsible for selecting a team independent of the Quality Assurance Department to perform periodic audits of the Quality Assurance Department. The results of these audits are presented to the Director Nuclear Assurance and the Company Nuclear Review Board (CNRB).

The Nuclear Assurance organization is shown in Appendix A.

a. Nuclear Safety Speakout

The Nuclear Safety Speakout Program provides a forum for employees and contractors to communicate their concerns to FPL. Concerns are documented, investigated and corrective actions are taken when necessary. The program offers confidentiality.

b. Quality Assurance Department

The Quality Assurance Department is responsible for administering the FPL Quality Assurance Program. This includes developing and verifying implementation of corporate policies, plans, requirements, and procedures affecting quality. The Quality Assurance Department retains responsibility for delegated portions of the Quality Assurance Program by performing initial evaluation and subsequent periodic audits of the contractors' Quality Assurance Programs. The Quality Assurance Program responsibility further extends to the performance of audits within the Company to assure management that the established requirements and procedures are being implemented, and that the Program complies with the baseline document requirements.

The organizational freedom of the Quality Assurance function is accomplished through the corporate structure, illustrated in Appendix A, which provides independence from those departments responsible for design, procurement, engineering, construction and operation. With quality assurance as its sole function the Quality Assurance Department, both on-site and off--site, is completely free from the cost and scheduling pressures of design, procurement, construction and operation. The Quality Assurance Department has the freedom and authority to: a) identify quality problems; b) initiate, recommend or provide corrective action; c) verify implementation of the corrective action; and d) recommend the stoppage of work or operations adverse to quality, when necessary. The QA Supervisor Performance Assessment, QA Supervisor Procurement Quality, Site Quality Manager - St. Lucie, and Site Quality Manager - Turkey Point report administratively and functionally to the Director Nuclear Assurance. These reporting relationships assure that the Quality Assurance Department has direct access to the levels of management necessary to assure effective implementation of the Quality Assurance Program.

The duties, responsibilities, and authorities of each Quality Assurance group are described in the sections which follow.

1) Performance Assessment

The QA Supervisor Performance Assessment directs and administers the Corporate Quality Assurance Program assuring compliance with the baseline documents listed in Appendix C of this Topical Quality Assurance Report. Quality Performance Assessment activities include the following:

- develop and maintain the corporate Quality Assurance Manual, including the administration of the Quality Assurance Program Review Committee (QAPRC);
- develop and implement a Quality Assurance indoctrination program for FPL personnel;
- prepare reports on Quality Assurance Program activities for review by the CNRB;

- plan, coordinate and implement a comprehensive system of periodic internal audits with support from the other Quality Assurance groups, when necessary;

- perform periodic activity audits of FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

- ~~provide NDE Level III services including technical direction and monitoring of NDE activities performed by Quality Control at the plant sites (PTN and PSL).~~ **(R1005)**

2) Procurement Quality

The QA Supervisor Procurement Quality directs and administers the Procurement Quality program in support of both nuclear plants. Procurement Quality activities include the following:

- perform appropriate surveillance of hardware during manufacture;

- develop and implement a program for auditing of supplier Quality Assurance/Quality Control programs including Architect Engineer/Nuclear Steam Supply System Suppliers;

- assist other FPL departments in the identification of quality problems associated with procurement and storage; initiate, recommend, or provide solution; and verify implementation of solutions;

- maintain the Quality Assurance Department list of approved suppliers;

For purchased items and services, the responsibility of this group extends through receipt of shipment or performance of contract.

3) Site Quality Assurance

Turkey Point Nuclear (PTN) and St. Lucie (PSL)

Quality Assurance activities at the plant sites (PTN and PSL) are accomplished by the respective site Quality Assurance groups, reporting to the Site Quality Manager. The Site Quality Manager has responsibility for on-site development and implementation of the Quality Assurance Program, including the following:

- coordinate the development and implementation of quality assurance policies, plans, requirements, and procedures at the plant site;

- perform audits, assessments and other observations as specified in procedures and instructions to verify compliance with Quality Assurance Program commitments;

- perform periodic activity audits of site generated FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

- recommend stoppage of work or operations adverse to quality at the plant site in accordance with the appropriate instructions;

- review and comment on Quality Instructions or equivalent quality administrative procedures prior to issue, with respect to the requirements of the FPL Quality Assurance Program, the applicable Final Safety Analysis Report, and the applicable Technical Specifications;

- perform audits of the architect engineer and Nuclear Steam Supply System suppliers both on-site and off-site, in conjunction with the Procurement Quality group.

The interface with the Procurement Quality group ends with the receipt of a shipment of nuclear safety-related equipment at the plant site. The Quality Assurance program for the shipment is then within the purview of the Site Quality Assurance group.

The Quality Manager - Turkey Point and Quality Manager - St. Lucie are additionally responsible for the establishment and implementation of quality control aspects of the Quality Assurance Program at the plant site with the ~~exception~~ **exceptions** of receipt inspection of purchased items **and NDE for acceptance of repairs and modifications**. Reporting directly to the Site Quality Manager are the Quality Control Supervisors who have the authority and freedom to administer the Quality Control program and, when necessary, to stop activities adverse to quality. The Quality Control Supervisors and personnel performing Quality Control inspection functions are required to be independent of groups or persons performing activities that they may be required to verify or inspect. **(R1005)**

Quality Control responsibilities include:

- inspection, monitoring, surveillance, and review of plant activities to verify compliance with the provision of the facility operating license and the Quality Assurance Manual;

- acceptance of the installed items;

1.3.1.6 Nuclear Business Services

The Director Business Services is responsible for Nuclear Division business and financial planning and analysis and nuclear plant support in the areas of document control and QA records management, security, emergency preparedness, and radiological services.

Nuclear Business Services is shown in Appendix A.

1.3.1.7 Nuclear Procurement & Logistics

The Manager of Nuclear Procurement & Logistics is responsible for:

- Coordinating contract activities.
- Negotiating, generating, issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection of FPL nuclear plants, and for materials and equipment to support Nuclear Division staff;
- Reviewing procurement documents to assure that technical and quality requirements developed by others are incorporated into the procurement documents which it authorizes.
- Performing receipt inspection to verify that purchased items comply with procurement document requirements.
- Controlling materials received at each nuclear plant site in accordance with company policies and procedures.

1.3.2 Support Departments

Providing support activities for the Nuclear Division are Corporate Records, Environmental Affairs, Protection & Control Systems, and Information Management. The reporting relationship of each department is described in the following sections and is shown in Appendix A.

1.3.2.1 Corporate Records

The Supervisor Corporate Records is responsible for:

- storage, retrieval and control of Quality Assurance records received from other departments;
- assisting with the development and implementation of records and micrographics programs;
- maintaining a QARSET approved storage facility;
- serving as the Records Official.

1.3.2.1.a The Records Official, reporting to the General Counsel and Secretary is responsible for:

- ensuring the Quality Assurance records storage and preservation activities are in accordance with applicable recordkeeping requirements;

- locating acceptable record storage areas when requested;

- leading the evaluation of specially designated QARSET approved storage facilities, maintaining records of this evaluation, and establishing schedules to assure that re-evaluations are performed every two (2) years.

1.3.2.2 Environmental Services

Environmental Services is responsible for obtaining the federal and state environmental permits required for FPL facilities and operations. Environmental Services is also responsible for providing technical support on environmental regulatory requirements, including regulatory development, enforcement actions, compliance with environmental requirements and environmental assessments and clean-ups at all company facilities, as well as technical support and/or advice on non-radiological environmental monitoring (federal and state) programs at the nuclear power plant sites.

The Site Vice President has overall responsibility for implementation of the Environmental Protection Plans (EPPs) at nuclear power plant sites.

The Environmental Services Department through its functional areas is responsible for providing technical support and/or advice on non-radiological environmental monitoring programs and oversight of other requirements related to the Environmental Protection Plans. The Department provides review of proposed changes to the Environmental Protection Plans, review of plant changes, tests or experiments and review of other plant activities which may be subject to environmental regulations to ensure their compliance.

The Department provides information as necessary to the CNRB Chairman on environmental matters for which requirements are included in Environmental Protection Plans.

1.3.2.3 Station Area Operations

The Director of Station Area Operations reports to the Vice President of Power Systems.

Station Area Operations is responsible for:

- test, calibration and maintenance of certain high voltage electrical protective relays for safety-related systems of the nuclear plant;

- final wiring connection checks;

- preoperational check-out and test of system protection devices;

- providing inspection of equipment under their cognizance;

- providing certain setpoint and checkpoint values for protective devices.

1.3.2.4 Information Management

The Corporate Information Management organization is shown in Appendix A.

Information Management is responsible for ensuring the integrity of the operating environment and the applications used by the Nuclear Division. The Director of Information Management Operations and the Manager of IM - Planning and Architecture report to the Vice President of Information Management.

1.3.2.4.a The Director of Information Management Operations is responsible for:

- the installation and maintenance of operating system software and the operation of computer hardware for FPL's corporate computer system;
- executing software production release and change control activities.

1.3.2.4.b The Manager of IM - Planning and Architecture is responsible for administering physical databases and providing on-going technical support.

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1.1 GENERAL REQUIREMENTS

The Florida Power & Light (FPL) organizational structure shall be defined such that the responsibilities for establishment and implementation of the Quality Assurance Program are clearly identified. The authority and duties of individuals and organizations performing quality assurance and quality control functions shall be described, and shall illustrate the organizational independence and authority necessary to identify problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. In addition, the description shall illustrate that persons or groups responsible for verifying the correct performance of an activity are independent of the person or groups responsible for performing the activity.

1.2 IMPLEMENTATION

The FPL Chairman of the Board and Chief Executive Officer is ultimately responsible for the execution of the Quality Assurance Program for FPL nuclear power plants. The authority for developing and verifying execution of the program is delegated to the President Nuclear Division and the Director Nuclear Assurance. The reporting relationship of each department involved with the Quality Assurance Program is shown in Appendix A.

To provide for a review and evaluation of Quality Assurance Program policies and activities, the President Nuclear Division has established the Company Nuclear Review Board (CNRB). This organization's responsibilities are defined in Section 1.3.1.

In addition, a Quality Assurance Program Review Committee (QAPRC) has been established to review changes to the Quality Assurance Program and to provide an interface for quality matters in each department affecting quality. The QAPRC is an interdepartmental organization with the responsibility to review and resolve recommended changes to the Quality Assurance Program. This committee is administered by the Quality Assurance Performance Assessment group. Quality Assurance Program changes reviewed by the QAPRC are reviewed and signed by the affected department heads.

A Quality Assurance Program Review Committee (QAPRC) Member shall be designated by the head of each department or organization. The QAPRC Member is the prime interface for coordination of quality matters within the member's department, with the Quality Assurance Department, and with other departments.

The head of each department or organization performing activities affecting quality is responsible for: a) identifying those activities within the organization which affect quality as defined by the Quality Assurance Program; b) establishing and clearly defining the duties and responsibilities of personnel within his organization who execute those activities affecting quality; and c) planning, selecting, and training personnel to meet the requirements of the Quality Assurance Program. The responsibility, authority, and organizational relationship for performing activities affecting quality within each organization shall be established and delineated in organizational charts and written job or functional descriptions.

Activities affecting quality may be performed by FPL or be contracted. Should any of these functions be contracted, the contractor may perform the activities under his own Quality Assurance Program, which must have prior approval by FPL Quality Assurance, or the contractor may directly adopt the requirements of the FPL Quality Assurance Manual. If the contractor implements the Quality Control function directly to the FPL Quality Assurance Manual requirements, the contractor's Quality Control Supervisor shall have the authority and freedom to administer the Quality Control program.

1.3 RESPONSIBILITIES

The organization charts in Appendix A illustrate the lines of authority and areas of responsibility for each of the organizations that are involved in activities affecting quality. Below are listed the departments and organizations that have quality assurance responsibilities. Organizational responsibilities for implementation of the Quality Assurance Program are described in the Topical Quality Requirements (TQRs).

1.3.1	Nuclear Division	1.3.2	Support Departments
1.3.1.1	Plant Vice Presidents	1.3.2.1	Corporate Records
1.3.1.2	Administrative Support and Special Projects	1.3.2.2	Environmental Services
1.3.1.3	Nuclear Engineering	1.3.2.3	Station Area Operations
1.3.1.4	Nuclear Information Systems	1.3.2.4	Information Management
1.3.1.5	Nuclear Assurance	**1.3.2.5**	**Integrated Supply Chain (R1010)**
1.3.1.6	Nuclear Business Services		
~~1.3.1.7~~	~~Nuclear Procurement & Logistics~~ **(R1010)**		

1.3.1 Nuclear Division

Throughout plant life, the Nuclear Division maintains control of and responsibility for nuclear power plant design, preoperational and start-up testing, operation, maintenance, refueling, and modification of the plant in accordance with written and approved procedures.

The President Nuclear Division has overall responsibility for the Nuclear Division's activities including corporate responsibility for overall plant nuclear safety. Reporting to the President Nuclear Division are: the Vice President - Turkey Point Plant, Vice President - St. Lucie Plant, Director Nuclear Assurance, Vice President Nuclear Engineering, Manager Administrative Support and Special Projects, the Director Nuclear Business Services, **and** Manager Nuclear Information Systems~~, and Manager Nuclear Procurement & Logistics~~. **(R1010)**

The Company Nuclear Review Board (CNRB), reporting to the President Nuclear Division, is comprised of executive level members of management with responsibilities for the execution of the Quality Assurance Program. The CNRB reviews, or directs the performance of reviews of, activities concerning the technical aspects of the operating nuclear power plant insofar as they impact plant safety, the health and safety of the public, and laws, regulations and licensing commitments. In addition, audits of these areas are performed under the cognizance of the CNRB.

The CNRB composition is described in Section 6.0 of each facility's Technical Specifications. Subjects within the purview of the CNRB are listed in the appropriate plant Technical Specifications. The CNRB has the authority to carry out its responsibilities by way of written action letters, verbal directions, meeting minutes or appointed subcommittees. Where necessary, the CNRB may use consulting services to perform required reviews.

The CNRB is responsible for reviewing and evaluating Quality Assurance Program policies and activities. Quality Assurance Program status reports shall be periodically given by the Quality Assurance Department.

CNRB meetings shall be held by the Chairman to keep members apprised of conditions including significant problems that require management attention. Periodic audits of the Quality Assurance Department shall be performed by a team independent of the Quality Assurance Department. The results of this audit are presented to the Director Nuclear Assurance and the CNRB.

1.3.1.1 Plant Vice Presidents

The Vice President - St. Lucie Plant and Vice President - Turkey Point Plant are accountable for the operation, maintenance, and modification of their respective nuclear plant, as well as the selection, development and direction of the assigned staff. They will act as liaison between the plants and corporate headquarters, and are accountable for ensuring that company policies and procedures are properly implemented and continued at the nuclear site, including control of material. The Plant Vice President has overall responsibility for implementation of the Environmental Protection Plans at their respective sites.

Other responsibilities of the site Vice President include the following:

Information Services (PSL Only)

- Configuration management.

Nuclear Training

- Preparation of policy documents regarding nuclear training;
- Support to secure the necessary resources to ensure that site personnel are adequately trained. They must have adequate technical and job related skills to provide safe and efficient operation while complying with NRC requirements.

Protection Services

- Coordinate with the opposite plant site for overall development and implementation of the FPL Nuclear Security program.

Nuclear Business Systems

- Configuration Management (PTN Only)

Nuclear Licensing

- Maintenance of the operating license;
- Interface with the NRC;
- Resolution of NRC safety and regulatory issues;
- Administering the Operating Experience and Feedback System.
- Advising senior management on a regular basis of important developments in licensing areas which could significantly affect the Nuclear Division.

The organization of Turkey Point Plant and St. Lucie Plant is shown in Appendix A.

The Plant General Manager - PSL and Plant General Manager - PTN, through the respective Plant Vice President, are responsible for the safe operation of the nuclear plant. The Plant General Managers have control of the onsite resources necessary for the safe operation and maintenance regardless of organizational reporting.

The Plant Nuclear Safety Committee (PNSC) at Turkey Point Plant and the Facility Review Group (FRG) at the St. Lucie Plant are comprised of key plant management and staff personnel as described in the plant Technical Specifications. The PNSC/FRG serves the plant manager in a technical advisory capacity for the review of all safety-related procedures and activities that impact plant safety and the facility operating license.

1.3.1.2 Administrative Support and Special Projects

The Manager Administrative Support and Special Projects is responsible for providing administrative support to Nuclear Division Executive Management and for management of Special Projects. These include:

- Directing project teams to address Nuclear Division issues;
- Providing Nuclear Division interface with INPO and NEI;
- Assisting in the performance of self assessment and benchmarking activities.

1.3.1.3 Nuclear Engineering

The Vice President Nuclear Engineering is responsible for nuclear plant design and engineering support.

The Nuclear Engineering organization is shown in Appendix A.

a. Nuclear Engineering

Nuclear Engineering includes personnel located at both nuclear sites and at the corporate office. Nuclear Engineering performs design-related activities and delegates design-related activities to qualified contractors. For activities performed by Nuclear Engineering, the work is governed by FPL's Quality Assurance Program, and Nuclear Engineering is responsible for approval of the design output.

Delegated activities are performed in accordance with an FPL approved Quality Assurance Program and the contractor is responsible for approval of design output. Nuclear Engineering is responsible for defining the scope of delegated activities and the responsibilities of the contractor. Prior to the release of design outputs by contractor organizations, Nuclear Engineering ensures that the contractor is technically qualified to perform the design-related activity.

The Manager - Turkey Point Engineering and the Manager - St. Lucie Engineering provide on-site engineering support and direct the engineering aspects of all FPL nuclear power plant projects during construction and operation to assure efficient, economical and reliable power plant design, conformance with engineering schedules and budgets and compliance with regulatory requirements.

Nuclear Engineering is responsible for:

- power plant design related aspects of the FPL Quality Assurance Program throughout all phases of plant life;

- development and maintenance of the design control program governing design-related activities performed by Nuclear Engineering and for providing technical support to the Quality Assurance Department for assessing the adequacy, implementation and effectiveness of contractor design control programs;

- the preparation, revision, approval and distribution of plant design records that are identified to be maintained as "as -constructed" drawings during plant operation;

- the development, control, and performance of certain aspects of items and services procurement, including establishment of procurement standards, the technical evaluation, equivalency evaluation, and commercial grade dedication of replacement parts/components for nuclear plants;

- review of the technical and quality requirements in procurement requisitioning documents and changes thereto for safety related and quality related items and services, as well as configuration control activities for controlled design documentation associated with procurement. The review shall be performed by individuals other than the document originator;

- performing Nondestructive Examination (NDE) for inservice inspection and acceptance of repairs and modifications;

- NDE Level III services including technical direction and monitoring of NDE activities performed at the plant sites (PTN and PSL).

- Plant license renewal;

- Environmental issues;

- FPL liaison in matters of high level waste disposal.

Aspects of the above activities are performed by the Juno Beach Engineering organization as determined by the Vice President Nuclear Engineering.

b. Nuclear Fuel

The Manager Nuclear Fuel is responsible for nuclear fuel engineering and procurement activities including the following:

- assuring that technical and quality requirements (including inputs from other FPL departments) are incorporated in fuel contracts and letters of authorization;

- administering and managing contracts for nuclear fuel and related services to assure that technical and quality obligations are met, and serving as FPL liaison in all matters of nuclear fuel and fuel-related contracts;

- administering and managing spent fuel disposal contracts with Department of Energy and serving as FPL liaison in matters of nuclear fuel;

- all fuel related design, analyses, reviews, and technical assistance necessary to ensure the safe, reliable, and economic operation of the nuclear plants;

- the development and/or review of fuel and nuclear physics design;

- implementing and maintaining the FPL corporate nuclear material accountability program as described in Nuclear Fuel Standards;

- providing support to the Quality Assurance Department for their auditing of nuclear fuel design and fuel assembly manufacturing;

- performing audits and coordinating accountability reporting on all nuclear fuel.

c. Component Support and Inspections

- The Manager Component Support and Inspections is responsible for providing support to the plants as follows:

- providing technical support of activities associated with component reliability, materials evaluations, inspections, corrosion protection, non-destructive examination, and ASME Section XI implementation/problem resolution for nuclear plant components;

- providing specific component expertise, metallurgical support, and non-destructive examination and inspections;

- establishing the FPL Welding Program to meet the requirements of the Quality Assurance Program and applicable codes and standards;

- developing, maintaining, and controlling the procedures and instructions to implement the FPL Welding Program; and

- originating and qualifying welding procedure specifications.

d. Reliability and Risk Assessment

The Supervisor of Reliability and Risk Assessment is responsible for providing support to the plants as follows:

- prepare and maintain Probabilistic Safety Assessment (PSA) for each plant;

- perform Risk Assessments in support of Maintenance activities;

- perform Risk Assessments in support of the NRC Maintenance Rule.

1.3.1.4 Nuclear Information Systems

The Manager, Nuclear Information Systems is responsible for the identification, design, development, implementation, on-going maintenance and control of all Nuclear Division information system software (excluding process software). This includes:

Assuring compliance with FPL software QA commitments by ensuring that appropriate controls are applied;

- Identifying applicable software in a Computer Software Index (CSI)
- Infrastructure planning, operations and maintenance;
- Coordinating and directing computer hardware and telecommunication planning and control.
- Formal approval of all hardware or operating system software changes or resolutions to problems occurring on computer systems under the control of Information Management.

1.3.1.5 Nuclear Assurance

The Director Nuclear Assurance is responsible for the selection, technical direction, administrative control (e.g. performance appraisal, salary review, hire/fire, position assignment) staffing, training and development of personnel required for supervisory and operating continuity of the Quality Assurance Department, Nuclear Safety Speakout, and the CNRB Subcommittee. The Director Nuclear Assurance serves as the CNRB Chairman. The Director Nuclear Assurance also initiates QA Program policy changes when necessary. In addition, the Director Nuclear Assurance is responsible for selecting a team independent of the Quality Assurance Department to perform periodic audits of the Quality Assurance Department. The results of these audits are presented to the Director Nuclear Assurance and the Company Nuclear Review Board (CNRB).

The Nuclear Assurance organization is shown in Appendix A.

a. Nuclear Safety Speakout

The Nuclear Safety Speakout Program provides a forum for employees and contractors to communicate their concerns to FPL. Concerns are documented, investigated and corrective actions are taken when necessary. The program offers confidentiality.

b. Quality Assurance Department

The Quality Assurance Department is responsible for administering the FPL Quality Assurance Program. This includes developing and verifying implementation of corporate policies, plans, requirements, and procedures affecting quality. The Quality Assurance Department retains responsibility for delegated portions of the Quality Assurance Program by performing initial evaluation and subsequent periodic audits of the contractors' Quality Assurance Programs. The Quality Assurance Program responsibility further extends to the performance of audits within the Company to assure management that the established requirements and procedures are being implemented, and that the Program complies with the baseline document requirements.

The organizational freedom of the Quality Assurance function is accomplished through the corporate structure, illustrated in Appendix A, which provides independence from those departments responsible for design, procurement, engineering, construction and operation. With quality assurance as its sole function the Quality Assurance Department, both on-site and off--site, is completely free from the cost and scheduling pressures of design, procurement, construction and operation. The Quality Assurance Department has the freedom and authority to: a) identify quality problems; b) initiate, recommend or provide corrective action; c) verify implementation of the corrective action; and d) recommend the stoppage of work or operations adverse to quality, when necessary. The QA Supervisor Performance Assessment, QA Supervisor Procurement Quality, Site Quality Manager - St. Lucie, and Site Quality Manager - Turkey Point report administratively and functionally to the Director Nuclear Assurance. These reporting relationships assure that the Quality Assurance Department has direct access to the levels of management necessary to assure effective implementation of the Quality Assurance Program.

The duties, responsibilities, and authorities of each Quality Assurance group are described in the sections which follow.

1) Performance Assessment

The QA Supervisor Performance Assessment directs and administers the Corporate Quality Assurance Program assuring compliance with the baseline documents listed in Appendix C of this Topical Quality Assurance Report. Quality Performance Assessment activities include the following:

- develop and maintain the corporate Quality Assurance Manual, including the administration of the Quality Assurance Program Review Committee (QAPRC);
- develop and implement a Quality Assurance indoctrination program for FPL personnel;
- prepare reports on Quality Assurance Program activities for review by the CNRB;

- plan, coordinate and implement a comprehensive system of periodic internal audits with support from the other Quality Assurance groups, when necessary;

- perform periodic activity audits of FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

2) Procurement Quality

The QA Supervisor Procurement Quality directs and administers the Procurement Quality program in support of both nuclear plants. Procurement Quality activities include the following:

- perform appropriate surveillance of hardware during manufacture;

- develop and implement a program for auditing of supplier Quality Assurance/Quality Control programs including Architect Engineer/Nuclear Steam Supply System Suppliers;

- assist other FPL departments in the identification of quality problems associated with procurement and storage; initiate, recommend, or provide solution; and verify implementation of solutions;

- maintain the Quality Assurance Department list of approved suppliers;

For purchased items and services, the responsibility of this group extends through receipt of shipment or performance of contract.

3) Site Quality Assurance

Turkey Point Nuclear (PTN) and St. Lucie (PSL)

Quality Assurance activities at the plant sites (PTN and PSL) are accomplished by the respective site Quality Assurance groups, reporting to the Site Quality Manager. The Site Quality Manager has responsibility for on-site development and implementation of the Quality Assurance Program, including the following:

- coordinate the development and implementation of quality assurance policies, plans, requirements, and procedures at the plant site;

- perform audits, assessments and other observations as specified in procedures and instructions to verify compliance with Quality Assurance Program commitments;

- perform periodic activity audits of site generated FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

- recommend stoppage of work or operations adverse to quality at the plant site in accordance with the appropriate instructions;

- review and comment on Quality Instructions or equivalent quality administrative procedures prior to issue, with respect to the requirements of the FPL Quality Assurance Program, the applicable Final Safety Analysis Report, and the applicable Technical Specifications;

- perform audits of the architect engineer and Nuclear Steam Supply System suppliers both on-site and off-site, in conjunction with the Procurement Quality group.

The interface with the Procurement Quality group ends with the receipt of a shipment of nuclear safety-related equipment at the plant site. The Quality Assurance program for the shipment is then within the purview of the Site Quality Assurance group.

The Quality Manager - Turkey Point and Quality Manager - St. Lucie are additionally responsible for the establishment and implementation of quality control aspects of the Quality Assurance Program at the plant site with the exceptions of receipt inspection of purchased items and NDE for acceptance of repairs and modifications. Reporting directly to the Site Quality Manager are the Quality Control Supervisors who have the authority and freedom to administer the Quality Control program and, when necessary, to stop activities adverse to quality. The Quality Control Supervisors and personnel performing Quality Control inspection functions are required to be independent of groups or persons performing activities that they may be required to verify or inspect.

Quality Control responsibilities include:

- inspection, monitoring, surveillance, and review of plant activities to verify compliance with the provision of the facility operating license and the Quality Assurance Manual;

- acceptance of the installed items;

1.3.1.6 Nuclear Business Services

The Director Business Services is responsible for Nuclear Division business and financial planning and analysis and nuclear plant support in the areas of document control and QA records management, security, emergency preparedness, and radiological services.

Nuclear Business Services is shown in Appendix A.

~~1.3.1.7 Nuclear Procurement & Logistics~~

~~The Manager of Nuclear Procurement & Logistics is responsible for:~~

- ~~Coordinating contract activities.~~
- ~~Negotiating, generating, issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection of FPL nuclear plants, and for materials and equipment to support Nuclear Division staff;~~
- ~~Reviewing procurement documents to assure that technical and quality requirements developed by others are incorporated into the procurement documents which it authorizes.~~
- ~~Performing receipt inspection to verify that purchased items comply with procurement document requirements.~~
- ~~Controlling materials received at each nuclear plant site in accordance with company policies and procedures.~~ **(R1010)**

1.3.2 Support Departments

Providing support activities for the Nuclear Division are Corporate Records, Environmental Affairs, ~~Protection & Control Systems~~ **Station Area Operations**, ~~and~~ Information Management**, and Integrated Supply Chain**. The reporting relationship of each department is described in the following sections and is shown in Appendix A. **(R1010)**

1.3.2.1 Corporate Records

The Supervisor Corporate Records is responsible for:

- storage, retrieval and control of Quality Assurance records received from other departments;
- assisting with the development and implementation of records and micrographics programs;
- maintaining a QARSET approved storage facility;
- serving as the Records Official.

1.3.2.1.a The Records Official, reporting to the General Counsel and Secretary is responsible for:

- ensuring the Quality Assurance records storage and preservation activities are in accordance with applicable recordkeeping requirements;
- locating acceptable record storage areas when requested;
- leading the evaluation of specially designated QARSET approved storage facilities, maintaining records of this evaluation, and establishing schedules to assure that re-evaluations are performed every two (2) years.

1.3.2.2 Environmental Services

Environmental Services is responsible for obtaining the federal and state environmental permits required for FPL facilities and operations. Environmental Services is also responsible for providing technical support on environmental regulatory requirements, including regulatory development, enforcement actions, compliance with environmental requirements and environmental assessments and clean-ups at all company facilities, as well as technical support and/or advice on non-radiological environmental monitoring (federal and state) programs at the nuclear power plant sites.

The Site Vice President has overall responsibility for implementation of the Environmental Protection Plans (EPPs) at nuclear power plant sites.

The Environmental Services Department through its functional areas is responsible for providing technical support and/or advice on non-radiological environmental monitoring programs and oversight of other requirements related to the Environmental Protection Plans. The Department provides review of proposed changes to the Environmental Protection Plans, review of plant changes, tests or experiments and review of other plant activities which may be subject to environmental regulations to ensure their compliance.

The Department provides information as necessary to the CNRB Chairman on environmental matters for which requirements are included in Environmental Protection Plans.

1.3.2.3 Station Area Operations

The Director of Station Area Operations reports to the Vice President of Power Systems.

Station Area Operations is responsible for:

- test, calibration and maintenance of certain high voltage electrical protective relays for safety-related systems of the nuclear plant;
- final wiring connection checks;
- preoperational check-out and test of system protection devices;
- providing inspection of equipment under their cognizance;
- providing certain setpoint and checkpoint values for protective devices.

1.3.2.4 Information Management

The Corporate Information Management organization is shown in Appendix A.

Information Management is responsible for ensuring the integrity of the operating environment and the applications used by the Nuclear Division. The Director of Information Management Operations and the Manager of IM - Planning and Architecture report to the Vice President of Information Management.

1.3.2.4.a The Director of Information Management Operations is responsible for:

- the installation and maintenance of operating system software and the operation of computer hardware for FPL's corporate computer system;
- executing software production release and change control activities.

1.3.2.4.b The Manager of IM - Planning and Architecture is responsible for administering physical databases and providing on-going technical support.

1.3.2.5 Integrated Supply Chain (R1010)

The Vice President Integrated Supply Chain, through the Director of Nuclear & Power Generation Materials Operation and the Director Procurement and Contract Management, is responsible for:

- **Coordinating contract activities;**
- **Negotiating, generating, issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection of FPL nuclear plants, and for materials and equipment to support Nuclear Division staff;**
- **Reviewing procurement documents to assure that technical and quality requirements developed by others are incorporated into the procurement documents which it authorizes;**
- **Performing receipt inspection to verify that purchased items comply with procurement document requirements;**
- **Controlling materials received at each nuclear plant site in accordance with company policies and procedures.**

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

1.1 GENERAL REQUIREMENTS

The Florida Power & Light (FPL) organizational structure shall be defined such that the responsibilities for establishment and implementation of the Quality Assurance Program are clearly identified. The authority and duties of individuals and organizations performing quality assurance and quality control functions shall be described, and shall illustrate the organizational independence and authority necessary to identify problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. In addition, the description shall illustrate that persons or groups responsible for verifying the correct performance of an activity are independent of the person or groups responsible for performing the activity.

1.2 IMPLEMENTATION

The FPL Chairman of the Board and Chief Executive Officer is ultimately responsible for the execution of the Quality Assurance Program for FPL nuclear power plants. The authority for developing and verifying execution of the program is delegated to the President Nuclear Division and the Director Nuclear Assurance. The reporting relationship of each department involved with the Quality Assurance Program is shown in Appendix A.

To provide for a review and evaluation of Quality Assurance Program policies and activities, the President Nuclear Division has established the Company Nuclear Review Board (CNRB). This organization's responsibilities are defined in Section 1.3.1.

In addition, a Quality Assurance Program Review Committee (QAPRC) has been established to review changes to the Quality Assurance Program and to provide an interface for quality matters in each department affecting quality. The QAPRC is an interdepartmental organization with the responsibility to review and resolve recommended changes to the Quality Assurance Program. This committee is administered by the Quality Assurance Performance Assessment group. Quality Assurance Program changes reviewed by the QAPRC are reviewed and signed by the affected department heads.

A Quality Assurance Program Review Committee (QAPRC) Member shall be designated by the head of each department or organization. The QAPRC Member is the prime interface for coordination of quality matters within the member's department, with the Quality Assurance Department, and with other departments.

The head of each department or organization performing activities affecting quality is responsible for: a) identifying those activities within the organization which affect quality as defined by the Quality Assurance Program; b) establishing and clearly defining the duties and responsibilities of personnel within his organization who execute those activities affecting quality; and c) planning, selecting, and training personnel to meet the requirements of the Quality Assurance Program. The responsibility, authority, and organizational relationship for performing activities affecting quality within each organization shall be established and delineated in organizational charts and written job or functional descriptions.

Activities affecting quality may be performed by FPL or be contracted. Should any of these functions be contracted, the contractor may perform the activities under his own Quality Assurance Program, which must have prior approval by FPL Quality Assurance, or the contractor may directly adopt the requirements of the FPL Quality Assurance Manual. If the contractor implements the Quality Control function directly to the FPL Quality Assurance Manual requirements, the contractor's Quality Control Supervisor shall have the authority and freedom to administer the Quality Control program.

1.3 RESPONSIBILITIES

The organization charts in Appendix A illustrate the lines of authority and areas of responsibility for each of the organizations that are involved in activities affecting quality. Below are listed the departments and organizations that have quality assurance responsibilities. Organizational responsibilities for implementation of the Quality Assurance Program are described in the Topical Quality Requirements (TQRs).

1.3.1	Nuclear Division	1.3.2	Support Departments
1.3.1.1	Plant Vice Presidents	1.3.2.1	Corporate Records
1.3.1.2	Administrative Support and Special Projects	1.3.2.2	Environmental Services
1.3.1.3	Nuclear Engineering	1.3.2.3	Station Area Operations
1.3.1.4	Nuclear Information Systems	1.3.2.4	Information Management
1.3.1.5	Nuclear Assurance	1.3.2.5	Integrated Supply Chain
1.3.1.6	Nuclear Business Services		

1.3.1 Nuclear Division

Throughout plant life, the Nuclear Division maintains control of and responsibility for nuclear power plant design, preoperational and start-up testing, operation, maintenance, refueling, and modification of the plant in accordance with written and approved procedures.

The President Nuclear Division has overall responsibility for the Nuclear Division's activities including corporate responsibility for overall plant nuclear safety. Reporting to the President Nuclear Division are: the Vice President - Turkey Point Plant, Vice President - St. Lucie Plant, Director Nuclear Assurance, Vice President Nuclear Engineering, Manager Administrative Support and Special Projects, the Director Nuclear Business Services, and Manager Nuclear Information Systems.

The Company Nuclear Review Board (CNRB), reporting to the President Nuclear Division, is comprised of executive level members of management with responsibilities for the execution of the Quality Assurance Program. The CNRB reviews, or directs the performance of reviews of, activities concerning the technical aspects of the operating nuclear power plant insofar as they impact plant safety, the health and safety of the public, and laws, regulations and licensing commitments. In addition, audits of these areas are performed under the cognizance of the CNRB.

The CNRB composition is described in Section 6.0 of ~~each facility's Technical Specifications~~ **St. Lucie's Technical Specification or Chapter 12 of Turkey Point's Updated Final Safety Analysis Report (UFSAR).** Subjects within the purview of the CNRB are listed in ~~the appropriate plant Technical Specifications~~ **St. Lucie's Technical Specification or Turkey Point's UFSAR.** The CNRB has the authority to carry out its responsibilities by way of written action letters, verbal directions, meeting minutes or appointed subcommittees. Where necessary, the CNRB may use consulting services to perform required reviews. **(R1017)**

The CNRB is responsible for reviewing and evaluating Quality Assurance Program policies and activities. Quality Assurance Program status reports shall be periodically given by the Quality Assurance Department.

CNRB meetings shall be held by the Chairman to keep members apprised of conditions including significant problems that require management attention. Periodic audits of the Quality Assurance Department shall be performed by a team independent of the Quality Assurance Department. The results of this audit are presented to the Director Nuclear Assurance and the CNRB.

1.3.1.1 Plant Vice Presidents

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Other responsibilities of the site Vice President include the following:

Information Services (PSL Only)

- Configuration management.

Nuclear Training

- Preparation of policy documents regarding nuclear training;
- Support to secure the necessary resources to ensure that site personnel are adequately trained. They must have adequate technical and job related skills to provide safe and efficient operation while complying with NRC requirements.

Protection Services

- Coordinate with the opposite plant site for overall development and implementation of the FPL Nuclear Security program.

Nuclear Business Systems

- Configuration Management (PTN Only)

Nuclear Licensing

- Maintenance of the operating license;
- Interface with the NRC;
- Resolution of NRC safety and regulatory issues;
- Administering the Operating Experience and Feedback System.
- Advising senior management on a regular basis of important developments in licensing areas which could significantly affect the Nuclear Division.

The organization of Turkey Point Plant and St. Lucie Plant is shown in Appendix A.

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The Plant Nuclear Safety Committee (PNSC) at Turkey Point Plant and the Facility Review Group (FRG) at the St. Lucie Plant are comprised of key plant management and staff personnel as described in ~~the plant Technical Specifications~~ **St. Lucie's Technical Specification or Turkey Point's UFSAR**. The PNSC/FRG serves the plant manager in a technical advisory capacity for the review of all safety-related procedures and activities that impact plant safety and the facility operating license. **(R1017)**

1.3.1.2 Administrative Support and Special Projects

The Manager Administrative Support and Special Projects is responsible for providing administrative support to Nuclear Division Executive Management and for management of Special Projects. These include:

- Directing project teams to address Nuclear Division issues;
- Providing Nuclear Division interface with INPO and NEI;
- Assisting in the performance of self assessment and benchmarking activities.

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The Vice President Nuclear Engineering is responsible for nuclear plant design and engineering support.

The Nuclear Engineering organization is shown in Appendix A.

a. Nuclear Engineering

Nuclear Engineering includes personnel located at both nuclear sites and at the corporate office. Nuclear Engineering performs design-related activities and delegates design-related activities to qualified contractors. For activities performed by Nuclear Engineering, the work is governed by FPL's Quality Assurance Program, and Nuclear Engineering is responsible for approval of the design output.

Delegated activities are performed in accordance with an FPL approved Quality Assurance Program and the contractor is responsible for approval of design output. Nuclear Engineering is responsible for defining the scope of delegated activities and the responsibilities of the contractor. Prior to the release of design outputs by contractor organizations, Nuclear Engineering ensures that the contractor is technically qualified to perform the design-related activity.

The Manager - Turkey Point Engineering and the Manager - St. Lucie Engineering provide on-site engineering support and direct the engineering aspects of all FPL nuclear power plant projects during construction and operation to assure efficient, economical and reliable power plant design, conformance with engineering schedules and budgets and compliance with regulatory requirements.

Nuclear Engineering is responsible for:

- power plant design related aspects of the FPL Quality Assurance Program throughout all phases of plant life;

- development and maintenance of the design control program governing design-related activities performed by Nuclear Engineering and for providing technical support to the Quality Assurance Department for assessing the adequacy, implementation and effectiveness of contractor design control programs;

- the preparation, revision, approval and distribution of plant design records that are identified to be maintained as "as -constructed" drawings during plant operation;

- the development, control, and performance of certain aspects of items and services procurement, including establishment of procurement standards, the technical evaluation, equivalency evaluation, and commercial grade dedication of replacement parts/components for nuclear plants;

- review of the technical and quality requirements in procurement requisitioning documents and changes thereto for safety related and quality related items and services, as well as configuration control activities for controlled design documentation associated with procurement. The review shall be performed by individuals other than the document originator;

- performing Nondestructive Examination (NDE) for inservice inspection and acceptance of repairs and modifications;

- NDE Level III services including technical direction and monitoring of NDE activities performed at the plant sites (PTN and PSL).

- Plant license renewal;

- Environmental issues;

- FPL liaison in matters of high level waste disposal.

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b. Nuclear Fuel

The Manager Nuclear Fuel is responsible for nuclear fuel engineering and procurement activities including the following:

- assuring that technical and quality requirements (including inputs from other FPL departments) are incorporated in fuel contracts and letters of authorization;

- administering and managing contracts for nuclear fuel and related services to assure that technical and quality obligations are met, and serving as FPL liaison in all matters of nuclear fuel and fuel-related contracts;

- administering and managing spent fuel disposal contracts with Department of Energy and serving as FPL liaison in matters of nuclear fuel;

- all fuel related design, analyses, reviews, and technical assistance necessary to ensure the safe, reliable, and economic operation of the nuclear plants;

- the development and/or review of fuel and nuclear physics design;

- implementing and maintaining the FPL corporate nuclear material accountability program as described in Nuclear Fuel Standards;

- providing support to the Quality Assurance Department for their auditing of nuclear fuel design and fuel assembly manufacturing;

- performing audits and coordinating accountability reporting on all nuclear fuel.

c. Component Support and Inspections

- The Manager Component Support and Inspections is responsible for providing support to the plants as follows:

- providing technical support of activities associated with component reliability, materials evaluations, inspections, corrosion protection, non-destructive examination, and ASME Section XI implementation/problem resolution for nuclear plant components;

- providing specific component expertise, metallurgical support, and non-destructive examination and inspections;

- establishing the FPL Welding Program to meet the requirements of the Quality Assurance Program and applicable codes and standards;

- developing, maintaining, and controlling the procedures and instructions to implement the FPL Welding Program; and

- originating and qualifying welding procedure specifications.

d. Reliability and Risk Assessment

The Supervisor of Reliability and Risk Assessment is responsible for providing support to the plants as follows:

- prepare and maintain Probabilistic Safety Assessment (PSA) for each plant;

- perform Risk Assessments in support of Maintenance activities;

- perform Risk Assessments in support of the NRC Maintenance Rule.

1.3.1.4 Nuclear Information Systems

The Manager, Nuclear Information Systems is responsible for the identification, design, development, implementation, on-going maintenance and control of all Nuclear Division information system software (excluding process software). This includes:

Assuring compliance with FPL software QA commitments by ensuring that appropriate controls are applied;

- Identifying applicable software in a Computer Software Index (CSI)
- Infrastructure planning, operations and maintenance;
- Coordinating and directing computer hardware and telecommunication planning and control.
- Formal approval of all hardware or operating system software changes or resolutions to problems occurring on computer systems under the control of Information Management.

1.3.1.5 Nuclear Assurance

The Director Nuclear Assurance is responsible for the selection, technical direction, administrative control (e.g. performance appraisal, salary review, hire/fire, position assignment) staffing, training and development of personnel required for supervisory and operating continuity of the Quality Assurance Department, Nuclear Safety Speakout, and the CNRB Subcommittee. The Director Nuclear Assurance serves as the CNRB Chairman. The Director Nuclear Assurance also initiates QA Program policy changes when necessary. In addition, the Director Nuclear Assurance is responsible for selecting a team independent of the Quality Assurance Department to perform periodic audits of the Quality Assurance Department. The results of these audits are presented to the Director Nuclear Assurance and the Company Nuclear Review Board (CNRB).

The Nuclear Assurance organization is shown in Appendix A.

a. Nuclear Safety Speakout

The Nuclear Safety Speakout Program provides a forum for employees and contractors to communicate their concerns to FPL. Concerns are documented, investigated and corrective actions are taken when necessary. The program offers confidentiality.

b. Quality Assurance Department

The Quality Assurance Department is responsible for administering the FPL Quality Assurance Program. This includes developing and verifying implementation of corporate policies, plans, requirements, and procedures affecting quality. The Quality Assurance Department retains responsibility for delegated portions of the Quality Assurance Program by performing initial evaluation and subsequent periodic audits of the contractors' Quality Assurance Programs. The Quality Assurance Program responsibility further extends to the performance of audits within the Company to assure management that the established requirements and procedures are being implemented, and that the Program complies with the baseline document requirements.

The organizational freedom of the Quality Assurance function is accomplished through the corporate structure, illustrated in Appendix A, which provides independence from those departments responsible for design, procurement, engineering, construction and operation. With quality assurance as its sole function the Quality Assurance Department, both on-site and off--site, is completely free from the cost and scheduling pressures of design, procurement, construction and operation. The Quality Assurance Department has the freedom and authority to: a) identify quality problems; b) initiate, recommend or provide corrective action; c) verify implementation of the corrective action; and d) recommend the stoppage of work or operations adverse to quality, when necessary. The QA Supervisor Performance Assessment, QA Supervisor Procurement Quality, Site Quality Manager - St. Lucie, and Site Quality Manager - Turkey Point report administratively and functionally to the Director Nuclear Assurance. These reporting relationships assure that the Quality Assurance Department has direct access to the levels of management necessary to assure effective implementation of the Quality Assurance Program.

The duties, responsibilities, and authorities of each Quality Assurance group are described in the sections which follow.

1) Performance Assessment

The QA Supervisor Performance Assessment directs and administers the Corporate Quality Assurance Program assuring compliance with the baseline documents listed in Appendix C of this Topical Quality Assurance Report. Quality Performance Assessment activities include the following:

- develop and maintain the corporate Quality Assurance Manual, including the administration of the Quality Assurance Program Review Committee (QAPRC);
- develop and implement a Quality Assurance indoctrination program for FPL personnel;
- prepare reports on Quality Assurance Program activities for review by the CNRB;

- plan, coordinate and implement a comprehensive system of periodic internal audits with support from the other Quality Assurance groups, when necessary;

- perform periodic activity audits of FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

2) Procurement Quality

The QA Supervisor Procurement Quality directs and administers the Procurement Quality program in support of both nuclear plants. Procurement Quality activities include the following:

- perform appropriate surveillance of hardware during manufacture;

- develop and implement a program for auditing of supplier Quality Assurance/Quality Control programs including Architect Engineer/Nuclear Steam Supply System Suppliers;

- assist other FPL departments in the identification of quality problems associated with procurement and storage; initiate, recommend, or provide solution; and verify implementation of solutions;

- maintain the Quality Assurance Department list of approved suppliers;

For purchased items and services, the responsibility of this group extends through receipt of shipment or performance of contract.

3) Site Quality Assurance

Turkey Point Nuclear (PTN) and St. Lucie (PSL)

Quality Assurance activities at the plant sites (PTN and PSL) are accomplished by the respective site Quality Assurance groups, reporting to the Site Quality Manager. The Site Quality Manager has responsibility for on-site development and implementation of the Quality Assurance Program, including the following:

- coordinate the development and implementation of quality assurance policies, plans, requirements, and procedures at the plant site;

- perform audits, assessments and other observations as specified in procedures and instructions to verify compliance with Quality Assurance Program commitments;

- perform periodic activity audits of site generated FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

- recommend stoppage of work or operations adverse to quality at the plant site in accordance with the appropriate instructions;

- review and comment on Quality Instructions or equivalent quality administrative procedures prior to issue, with respect to the requirements of the FPL Quality Assurance Program, the applicable Final Safety Analysis Report, and the applicable Technical Specifications;

- perform audits of the architect engineer and Nuclear Steam Supply System suppliers both on-site and off-site, in conjunction with the Procurement Quality group.

The interface with the Procurement Quality group ends with the receipt of a shipment of nuclear safety-related equipment at the plant site. The Quality Assurance program for the shipment is then within the purview of the Site Quality Assurance group.

The Quality Manager - Turkey Point and Quality Manager - St. Lucie are additionally responsible for the establishment and implementation of quality control aspects of the Quality Assurance Program at the plant site with the exceptions of receipt inspection of purchased items and NDE for acceptance of repairs and modifications. Reporting directly to the Site Quality Manager are the Quality Control Supervisors who have the authority and freedom to administer the Quality Control program and, when necessary, to stop activities adverse to quality. The Quality Control Supervisors and personnel performing Quality Control inspection functions are required to be independent of groups or persons performing activities that they may be required to verify or inspect.

Quality Control responsibilities include:

- inspection, monitoring, surveillance, and review of plant activities to verify compliance with the provision of the facility operating license and the Quality Assurance Manual;

- acceptance of the installed items;

1.3.1.6 Nuclear Business Services

The Director Business Services is responsible for Nuclear Division business and financial planning and analysis and nuclear plant support in the areas of document control and QA records management, security, emergency preparedness, and radiological services.

Nuclear Business Services is shown in Appendix A.

1.3.2 Support Departments

Providing support activities for the Nuclear Division are Corporate Records, Environmental Affairs, Station Area Operations, Information Management, and Integrated Supply Chain. The reporting relationship of each department is described in the following sections and is shown in Appendix A.

1.3.2.1 Corporate Records

The Supervisor Corporate Records is responsible for:

- storage, retrieval and control of Quality Assurance records received from other departments;
- assisting with the development and implementation of records and micrographics programs;
- maintaining a QARSET approved storage facility;
- serving as the Records Official.

1.3.2.1.a The Records Official, reporting to the General Counsel and Secretary is responsible for:

- ensuring the Quality Assurance records storage and preservation activities are in accordance with applicable recordkeeping requirements;
- locating acceptable record storage areas when requested;
- leading the evaluation of specially designated QARSET approved storage facilities, maintaining records of this evaluation, and establishing schedules to assure that re-evaluations are performed every two (2) years.

1.3.2.2 Environmental Services

Environmental Services is responsible for obtaining the federal and state environmental permits required for FPL facilities and operations. Environmental Services is also responsible for providing technical support on environmental regulatory requirements, including regulatory development, enforcement actions, compliance with environmental requirements and environmental assessments and clean-ups at all company facilities, as well as technical support and/or advice on non-radiological environmental monitoring (federal and state) programs at the nuclear power plant sites.

The Site Vice President has overall responsibility for implementation of the Environmental Protection Plans (EPPs) at nuclear power plant sites.

The Environmental Services Department through its functional areas is responsible for providing technical support and/or advice on non-radiological environmental monitoring programs and oversight of other requirements related to the Environmental Protection Plans. The Department provides review of proposed changes to the Environmental Protection Plans, review of plant changes, tests or experiments and review of other plant activities which may be subject to environmental regulations to ensure their compliance.

The Department provides information as necessary to the CNRB Chairman on environmental matters for which requirements are included in Environmental Protection Plans.

1.3.2.3 Station Area Operations

The Director of Station Area Operations reports to the Vice President of Power Systems.

Station Area Operations is responsible for:

- test, calibration and maintenance of certain high voltage electrical protective relays for safety-related systems of the nuclear plant;
- final wiring connection checks;
- preoperational check-out and test of system protection devices;
- providing inspection of equipment under their cognizance;
- providing certain setpoint and checkpoint values for protective devices.

1.3.2.4 Information Management

The Corporate Information Management organization is shown in Appendix A.

Information Management is responsible for ensuring the integrity of the operating environment and the applications used by the Nuclear Division. The Director of Information Management Operations and the Manager of IM - Planning and Architecture report to the Vice President of Information Management.

1.3.2.4.a The Director of Information Management Operations is responsible for:

- the installation and maintenance of operating system software and the operation of computer hardware for FPL's corporate computer system;
- executing software production release and change control activities.

1.3.2.4.b The Manager of IM - Planning and Architecture is responsible for administering physical databases and providing on-going technical support.

1.3.2.5 Integrated Supply Chain

The Vice President Integrated Supply Chain, through the Director of Nuclear & Power Generation Materials Operation and the Director Procurement and Contract Management, is responsible for:

- Coordinating contract activities;
- Negotiating, generating, issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection of FPL nuclear plants, and for materials and equipment to support Nuclear Division staff;
- Reviewing procurement documents to assure that technical and quality requirements developed by others are incorporated into the procurement documents which it authorizes;
- Performing receipt inspection to verify that purchased items comply with procurement document requirements;
- Controlling materials received at each nuclear plant site in accordance with company policies and procedures.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

1.1 GENERAL REQUIREMENTS

The Florida Power & Light (FPL) organizational structure shall be defined such that the responsibilities for establishment and implementation of the Quality Assurance Program are clearly identified. The authority and duties of individuals and organizations performing quality assurance and quality control functions shall be described, and shall illustrate the organizational independence and authority necessary to identify problems; to initiate, recommend, or provide solutions; and to verify implementation of solutions. In addition, the description shall illustrate that persons or groups responsible for verifying the correct performance of an activity are independent of the person or groups responsible for performing the activity.

1.2 IMPLEMENTATION

The FPL Chairman of the Board and Chief Executive Officer is ultimately responsible for the execution of the Quality Assurance Program for FPL nuclear power plants. The authority for developing and verifying execution of the program is delegated to the President Nuclear Division and the Director Nuclear Assurance. The reporting relationship of each department involved with the Quality Assurance Program is shown in Appendix A.

To provide for a review and evaluation of Quality Assurance Program policies and activities, the President Nuclear Division has established the Company Nuclear Review Board (CNRB). This organization's responsibilities are defined in Section 1.3.1.

In addition, a Quality Assurance Program Review Committee (QAPRC) has been established to review changes to the Quality Assurance Program and to provide an interface for quality matters in each department affecting quality. The QAPRC is an interdepartmental organization with the responsibility to review and resolve recommended changes to the Quality Assurance Program. This committee is administered by the Quality Assurance Performance Assessment group. Quality Assurance Program changes reviewed by the QAPRC are reviewed and signed by the affected department heads.

A Quality Assurance Program Review Committee (QAPRC) Member shall be designated by the head of each department or organization. The QAPRC Member is the prime interface for coordination of quality matters within the member's department, with the Quality Assurance Department, and with other departments.

The head of each department or organization performing activities affecting quality is responsible for: a) identifying those activities within the organization which affect quality as defined by the Quality Assurance Program; b) establishing and clearly defining the duties and responsibilities of personnel within his organization who execute those activities affecting quality; and c) planning, selecting, and training personnel to meet the requirements of the Quality Assurance Program. The responsibility, authority, and organizational relationship for performing activities affecting quality within each organization shall be established and delineated in organizational charts and written job or functional descriptions.

Activities affecting quality may be performed by FPL or be contracted. Should any of these functions be contracted, the contractor may perform the activities under his own Quality Assurance Program, which must have prior approval by FPL Quality Assurance, or the contractor may directly adopt the requirements of the FPL Quality Assurance Manual. If the contractor implements the Quality Control function directly to the FPL Quality Assurance Manual requirements, the contractor's Quality Control Supervisor shall have the authority and freedom to administer the Quality Control program.

1.3 RESPONSIBILITIES

The organization charts in Appendix A illustrate the lines of authority and areas of responsibility for each of the organizations that are involved in activities affecting quality. Below are listed the departments and organizations that have quality assurance responsibilities. Organizational responsibilities for implementation of the Quality Assurance Program are described in the Topical Quality Requirements (TQRs).

1.3.1	Nuclear Division	1.3.2	Support Departments
1.3.1.1	Plant Vice Presidents	1.3.2.1	Corporate Records
1.3.1.2	Administrative Support and Special Projects	1.3.2.2	Environmental Services
1.3.1.3	Nuclear Engineering	1.3.2.3	~~Station Area Operations~~ **Transmission Operations (R1021)**
1.3.1.4	Nuclear Information Systems	1.3.2.4	Information Management
1.3.1.5	Nuclear Assurance	1.3.2.5	Integrated Supply Chain
1.3.1.6	Nuclear Business Services		

1.3.1 Nuclear Division

Throughout plant life, the Nuclear Division maintains control of and responsibility for nuclear power plant design, preoperational and start-up testing, operation, maintenance, refueling, and modification of the plant in accordance with written and approved procedures.

The President Nuclear Division has overall responsibility for the Nuclear Division's activities including corporate responsibility for overall plant nuclear safety. Reporting to the President Nuclear Division are: the Vice President - Turkey Point Plant, Vice President - St. Lucie Plant, Director Nuclear Assurance, Vice President Nuclear Engineering, Manager Administrative Support and Special Projects, the Director Nuclear Business Services, and Manager Nuclear Information Systems.

The Company Nuclear Review Board (CNRB), reporting to the President Nuclear Division, is comprised of executive level members of management with responsibilities for the execution of the Quality Assurance Program. The CNRB reviews, or directs the performance of reviews of, activities concerning the technical aspects of the operating nuclear power plant insofar as they impact plant safety, the health and safety of the public, and laws, regulations and licensing commitments. In addition, audits of these areas are performed under the cognizance of the CNRB.

The CNRB composition is described in Section 6.0 of St. Lucie's Technical Specification or Chapter 12 of Turkey Point's Updated Final Safety Analysis Report (UFSAR). Subjects within the purview of the CNRB are listed in St. Lucie's Technical Specification or Turkey Point's UFSAR. The CNRB has the authority to carry out its responsibilities by way of written action letters, verbal directions, meeting minutes or appointed subcommittees. Where necessary, the CNRB may use consulting services to perform required reviews.

The CNRB is responsible for reviewing and evaluating Quality Assurance Program policies and activities. Quality Assurance Program status reports shall be periodically given by the Quality Assurance Department.

CNRB meetings shall be held by the Chairman to keep members apprised of conditions including significant problems that require management attention. Periodic audits of the Quality Assurance Department shall be performed by a team independent of the Quality Assurance Department. The results of this audit are presented to the Director Nuclear Assurance and the CNRB.

1.3.1.1 Plant Vice Presidents

The Vice President - St. Lucie Plant and Vice President - Turkey Point Plant are accountable for the operation, maintenance, and modification of their respective nuclear plant, as well as the selection, development and direction of the assigned staff. They will act as liaison between the plants and corporate headquarters, and are accountable for ensuring that company policies and procedures are properly implemented and continued at the nuclear site, including control of material. The Plant Vice President has overall responsibility for implementation of the Environmental Protection Plans at their respective sites.

Other responsibilities of the site Vice President include the following:

Information Services (PSL Only)

- Configuration management.

Nuclear Training

- Preparation of policy documents regarding nuclear training;
- Support to secure the necessary resources to ensure that site personnel are adequately trained. They must have adequate technical and job related skills to provide safe and efficient operation while complying with NRC requirements.

Protection Services

- Coordinate with the opposite plant site for overall development and implementation of the FPL Nuclear Security program.

Nuclear Business Systems

- Configuration Management (PTN Only)

Nuclear Licensing

- Maintenance of the operating license;
- Interface with the NRC;
- Resolution of NRC safety and regulatory issues;
- Administering the Operating Experience and Feedback System.
- Advising senior management on a regular basis of important developments in licensing areas which could significantly affect the Nuclear Division.

The organization of Turkey Point Plant and St. Lucie Plant is shown in Appendix A.

The Plant General Manager - PSL and Plant General Manager - PTN, through the respective Plant Vice President, are responsible for the safe operation of the nuclear plant. The Plant General Managers have control of the onsite resources necessary for the safe operation and maintenance regardless of organizational reporting.

The Plant Nuclear Safety Committee (PNSC) at Turkey Point Plant and the Facility Review Group (FRG) at the St. Lucie Plant are comprised of key plant management and staff personnel as described in St. Lucie's Technical Specification or Turkey Point's UFSAR. The PNSC/FRG serves the plant manager in a technical advisory capacity for the review of all safety-related procedures and activities that impact plant safety and the facility operating license.

1.3.1.2 Administrative Support and Special Projects

The Manager Administrative Support and Special Projects is responsible for providing administrative support to Nuclear Division Executive Management and for management of Special Projects. These include:

- Directing project teams to address Nuclear Division issues;
- Providing Nuclear Division interface with INPO and NEI;
- Assisting in the performance of self assessment and benchmarking activities.

1.3.1.3 Nuclear Engineering

The Vice President Nuclear Engineering is responsible for nuclear plant design and engineering support.

The Nuclear Engineering organization is shown in Appendix A.

a. Nuclear Engineering

Nuclear Engineering includes personnel located at both nuclear sites and at the corporate office. Nuclear Engineering performs design-related activities and delegates design-related activities to qualified contractors. For activities performed by Nuclear Engineering, the work is governed by FPL's Quality Assurance Program, and Nuclear Engineering is responsible for approval of the design output.

Delegated activities are performed in accordance with an FPL approved Quality Assurance Program and the contractor is responsible for approval of design output. Nuclear Engineering is responsible for defining the scope of delegated activities and the responsibilities of the contractor. Prior to the release of design outputs by contractor organizations, Nuclear Engineering ensures that the contractor is technically qualified to perform the design-related activity.

The Manager - Turkey Point Engineering and the Manager - St. Lucie Engineering provide on-site engineering support and direct the engineering aspects of all FPL nuclear power plant projects during construction and operation to assure efficient, economical and reliable power plant design, conformance with engineering schedules and budgets and compliance with regulatory requirements.

Nuclear Engineering is responsible for:

- power plant design related aspects of the FPL Quality Assurance Program throughout all phases of plant life;

- development and maintenance of the design control program governing design-related activities performed by Nuclear Engineering and for providing technical support to the Quality Assurance Department for assessing the adequacy, implementation and effectiveness of contractor design control programs;

- the preparation, revision, approval and distribution of plant design records that are identified to be maintained as "as -constructed" drawings during plant operation;

- the development, control, and performance of certain aspects of items and services procurement, including establishment of procurement standards, the technical evaluation, equivalency evaluation, and commercial grade dedication of replacement parts/components for nuclear plants;

- review of the technical and quality requirements in procurement requisitioning documents and changes thereto for safety related and quality related items and services, as well as configuration control activities for controlled design documentation associated with procurement. The review shall be performed by individuals other than the document originator;

- performing Nondestructive Examination (NDE) for inservice inspection and acceptance of repairs and modifications;

- NDE Level III services including technical direction and monitoring of NDE activities performed at the plant sites (PTN and PSL).

- Plant license renewal;

- Environmental issues;

- FPL liaison in matters of high level waste disposal.

Aspects of the above activities are performed by the Juno Beach Engineering organization as determined by the Vice President Nuclear Engineering.

b. Nuclear Fuel

The Manager Nuclear Fuel is responsible for nuclear fuel engineering and procurement activities including the following:

- assuring that technical and quality requirements (including inputs from other FPL departments) are incorporated in fuel contracts and letters of authorization;

- administering and managing contracts for nuclear fuel and related services to assure that technical and quality obligations are met, and serving as FPL liaison in all matters of nuclear fuel and fuel-related contracts;

- administering and managing spent fuel disposal contracts with Department of Energy and serving as FPL liaison in matters of nuclear fuel;

- all fuel related design, analyses, reviews, and technical assistance necessary to ensure the safe, reliable, and economic operation of the nuclear plants;

- the development and/or review of fuel and nuclear physics design;

- implementing and maintaining the FPL corporate nuclear material accountability program as described in Nuclear Fuel Standards;

- providing support to the Quality Assurance Department for their auditing of nuclear fuel design and fuel assembly manufacturing;

- performing audits and coordinating accountability reporting on all nuclear fuel.

c. Component Support and Inspections

- The Manager Component Support and Inspections is responsible for providing support to the plants as follows:

- providing technical support of activities associated with component reliability, materials evaluations, inspections, corrosion protection, non-destructive examination, and ASME Section XI implementation/problem resolution for nuclear plant components;

- providing specific component expertise, metallurgical support, and non-destructive examination and inspections;

- establishing the FPL Welding Program to meet the requirements of the Quality Assurance Program and applicable codes and standards;

- developing, maintaining, and controlling the procedures and instructions to implement the FPL Welding Program; and

- originating and qualifying welding procedure specifications.

d. Reliability and Risk Assessment

The Supervisor of Reliability and Risk Assessment is responsible for providing support to the plants as follows:

- prepare and maintain Probabilistic Safety Assessment (PSA) for each plant;

- perform Risk Assessments in support of Maintenance activities;

- perform Risk Assessments in support of the NRC Maintenance Rule.

1.3.1.4 Nuclear Information Systems

The Manager, Nuclear Information Systems is responsible for the identification, design, development, implementation, on-going maintenance and control of all Nuclear Division information system software (excluding process software). This includes:

Assuring compliance with FPL software QA commitments by ensuring that appropriate controls are applied;

- Identifying applicable software in a Computer Software Index (CSI)
- Infrastructure planning, operations and maintenance;
- Coordinating and directing computer hardware and telecommunication planning and control.
- Formal approval of all hardware or operating system software changes or resolutions to problems occurring on computer systems under the control of Information Management.

1.3.1.5 Nuclear Assurance

The Director Nuclear Assurance is responsible for the selection, technical direction, administrative control (e.g. performance appraisal, salary review, hire/fire, position assignment) staffing, training and development of personnel required for supervisory and operating continuity of the Quality Assurance Department, Nuclear Safety Speakout, and the CNRB Subcommittee. The Director Nuclear Assurance serves as the CNRB Chairman. The Director Nuclear Assurance also initiates QA Program policy changes when necessary. In addition, the Director Nuclear Assurance is responsible for selecting a team independent of the Quality Assurance Department to perform periodic audits of the Quality Assurance Department. The results of these audits are presented to the Director Nuclear Assurance and the Company Nuclear Review Board (CNRB).

The Nuclear Assurance organization is shown in Appendix A.

a. Nuclear Safety Speakout

The Nuclear Safety Speakout Program provides a forum for employees and contractors to communicate their concerns to FPL. Concerns are documented, investigated and corrective actions are taken when necessary. The program offers confidentiality.

b. Quality Assurance Department

The Quality Assurance Department is responsible for administering the FPL Quality Assurance Program. This includes developing and verifying implementation of corporate policies, plans, requirements, and procedures affecting quality. The Quality Assurance Department retains responsibility for delegated portions of the Quality Assurance Program by performing initial evaluation and subsequent periodic audits of the contractors' Quality Assurance Programs. The Quality Assurance Program responsibility further extends to the performance of audits within the Company to assure management that the established requirements and procedures are being implemented, and that the Program complies with the baseline document requirements.

The organizational freedom of the Quality Assurance function is accomplished through the corporate structure, illustrated in Appendix A, which provides independence from those departments responsible for design, procurement, engineering, construction and operation. With quality assurance as its sole function the Quality Assurance Department, both on-site and off--site, is completely free from the cost and scheduling pressures of design, procurement, construction and operation. The Quality Assurance Department has the freedom and authority to: a) identify quality problems; b) initiate, recommend or provide corrective action; c) verify implementation of the corrective action; and d) recommend the stoppage of work or operations adverse to quality, when necessary. The QA Supervisor Performance Assessment, QA Supervisor Procurement Quality, Site Quality Manager - St. Lucie, and Site Quality Manager - Turkey Point report administratively and functionally to the Director Nuclear Assurance. These reporting relationships assure that the Quality Assurance Department has direct access to the levels of management necessary to assure effective implementation of the Quality Assurance Program.

The duties, responsibilities, and authorities of each Quality Assurance group are described in the sections which follow.

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- develop and implement a Quality Assurance indoctrination program for FPL personnel;
- prepare reports on Quality Assurance Program activities for review by the CNRB;

- plan, coordinate and implement a comprehensive system of periodic internal audits with support from the other Quality Assurance groups, when necessary;

- perform periodic activity audits of FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

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The QA Supervisor Procurement Quality directs and administers the Procurement Quality program in support of both nuclear plants. Procurement Quality activities include the following:

- perform appropriate surveillance of hardware during manufacture;

- develop and implement a program for auditing of supplier Quality Assurance/Quality Control programs including Architect Engineer/Nuclear Steam Supply System Suppliers;

- assist other FPL departments in the identification of quality problems associated with procurement and storage; initiate, recommend, or provide solution; and verify implementation of solutions;

- maintain the Quality Assurance Department list of approved suppliers;

For purchased items and services, the responsibility of this group extends through receipt of shipment or performance of contract.

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Turkey Point Nuclear (PTN) and St. Lucie (PSL)

Quality Assurance activities at the plant sites (PTN and PSL) are accomplished by the respective site Quality Assurance groups, reporting to the Site Quality Manager. The Site Quality Manager has responsibility for on-site development and implementation of the Quality Assurance Program, including the following:

- coordinate the development and implementation of quality assurance policies, plans, requirements, and procedures at the plant site;

- perform audits, assessments and other observations as specified in procedures and instructions to verify compliance with Quality Assurance Program commitments;

- perform periodic activity audits of site generated FPL procurement and associated documents and changes to these documents to assure that the necessary quality requirements are imposed;

- recommend stoppage of work or operations adverse to quality at the plant site in accordance with the appropriate instructions;

- review and comment on Quality Instructions or equivalent quality administrative procedures prior to issue, with respect to the requirements of the FPL Quality Assurance Program, the applicable Final Safety Analysis Report, and the applicable Technical Specifications;

- perform audits of the architect engineer and Nuclear Steam Supply System suppliers both on-site and off-site, in conjunction with the Procurement Quality group.

The interface with the Procurement Quality group ends with the receipt of a shipment of nuclear safety-related equipment at the plant site. The Quality Assurance program for the shipment is then within the purview of the Site Quality Assurance group.

The Quality Manager - Turkey Point and Quality Manager - St. Lucie are additionally responsible for the establishment and implementation of quality control aspects of the Quality Assurance Program at the plant site with the exceptions of receipt inspection of purchased items and NDE for acceptance of repairs and modifications. Reporting directly to the Site Quality Manager are the Quality Control Supervisors who have the authority and freedom to administer the Quality Control program and, when necessary, to stop activities adverse to quality. The Quality Control Supervisors and personnel performing Quality Control inspection functions are required to be independent of groups or persons performing activities that they may be required to verify or inspect.

Quality Control responsibilities include:

- inspection, monitoring, surveillance, and review of plant activities to verify compliance with the provision of the facility operating license and the Quality Assurance Manual;

- acceptance of the installed items;

1.3.1.6 Nuclear Business Services

The Director Business Services is responsible for Nuclear Division business and financial planning and analysis and nuclear plant support in the areas of document control and QA records management, security, emergency preparedness, and radiological services.

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The Supervisor Corporate Records is responsible for:

- storage, retrieval and control of Quality Assurance records received from other departments;
- assisting with the development and implementation of records and micrographics programs;
- maintaining a QARSET approved storage facility;
- serving as the Records Official.

1.3.2.1.a The Records Official, reporting to the General Counsel and Secretary is responsible for:

- ensuring the Quality Assurance records storage and preservation activities are in accordance with applicable recordkeeping requirements;
- locating acceptable record storage areas when requested;
- leading the evaluation of specially designated QARSET approved storage facilities, maintaining records of this evaluation, and establishing schedules to assure that re-evaluations are performed every two (2) years.

1.3.2.2 Environmental Services

Environmental Services is responsible for obtaining the federal and state environmental permits required for FPL facilities and operations. Environmental Services is also responsible for providing technical support on environmental regulatory requirements, including regulatory development, enforcement actions, compliance with environmental requirements and environmental assessments and clean-ups at all company facilities, as well as technical support and/or advice on non-radiological environmental monitoring (federal and state) programs at the nuclear power plant sites.

The Site Vice President has overall responsibility for implementation of the Environmental Protection Plans (EPPs) at nuclear power plant sites.

The Environmental Services Department through its functional areas is responsible for providing technical support and/or advice on non-radiological environmental monitoring programs and oversight of other requirements related to the Environmental Protection Plans. The Department provides review of proposed changes to the Environmental Protection Plans, review of plant changes, tests or experiments and review of other plant activities which may be subject to environmental regulations to ensure their compliance.

The Department provides information as necessary to the CNRB Chairman on environmental matters for which requirements are included in Environmental Protection Plans.

1.3.2.3 ~~Station Area~~ **Transmission** Operations **(R1021)**

The Director of ~~Station Area~~ **Transmission** Operations reports to the Vice President of Power Systems.

~~Station Area~~ **Transmission** Operations is responsible for:

- test, calibration and maintenance of certain high voltage electrical protective relays for safety-related systems of the nuclear plant;
- final wiring connection checks;
- preoperational check-out and test of system protection devices;
- providing inspection of equipment under their cognizance;
- providing certain setpoint and checkpoint values for protective devices.

1.3.2.4 Information Management

The Corporate Information Management organization is shown in Appendix A.

Information Management is responsible for ensuring the integrity of the operating environment and the applications used by the Nuclear Division. The Director of Information Management Operations and the Manager of IM - Planning and Architecture report to the Vice President of Information Management.

1.3.2.4.a The Director of Information Management Operations is responsible for:

- the installation and maintenance of operating system software and the operation of computer hardware for FPL's corporate computer system;
- executing software production release and change control activities.

1.3.2.4.b The Manager of IM - Planning and Architecture is responsible for administering physical databases and providing on-going technical support.

1.3.2.5 Integrated Supply Chain

The Vice President Integrated Supply Chain, through the Director of Nuclear & Power Generation Materials Operation and the Director Procurement and Contract Management, is responsible for:

- Coordinating contract activities;
- Negotiating, generating, issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection of FPL nuclear plants, and for materials and equipment to support Nuclear Division staff;
- Reviewing procurement documents to assure that technical and quality requirements developed by others are incorporated into the procurement documents which it authorizes;
- Performing receipt inspection to verify that purchased items comply with procurement document requirements;
- Controlling materials received at each nuclear plant site in accordance with company policies and procedures.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

2.1 GENERAL REQUIREMENTS

Florida Power & Light Company has established a Quality Assurance Program which complies with the criteria of 10 CFR 50 Appendix B, and meets the requirements of Regulatory Guides and Industry Standards referenced in Appendix C of this report. The Topical Quality Requirements and attached Policy Statement, together with Quality Instructions document the Program and the FPL policy with regard to Quality Assurance. This Program shall be instituted for each plant site in a schedule consistent with accomplishing the required activity and shall be carried out throughout the life of FPL nuclear plants.

The requirements of the FPL Quality Assurance Program shall only apply to nuclear safety related structures, systems, and components as identified in the Safety Analysis Report for each nuclear unit. Additionally, the requirements of the FPL Quality Assurance Program shall apply to all FPL, contractor, or consultant organizations performing activities affecting the quality of safety related structures, systems, and components of FPL nuclear power plants. Portions of the FPL Quality Assurance Program requirements are also applicable to Quality Related items and services. Those portions applicable to specific Quality Related items or services shall be delineated in appropriate instructions.

Documented procedures shall require and define indoctrination and training of personnel performing activities affecting quality as necessary to assure that suitable proficiency is achieved and maintained.
Periodic program reviews of the status and adequacy of the FPL Quality Assurance Program shall be accomplished by the independent audit team described in Section 2.2.6.d and by Quality Assurance Department audits.

Management of organizations outside Florida Power & Light Company participating in the Program shall be required to regularly review the status and adequacy of that part of the FPL Quality Assurance Program which they are executing. The FPL Quality Assurance Department shall review and concur in the Quality Assurance Program of contractors.

2.2 IMPLEMENTATION

2.2.1 Goals and Objectives

As stated in the Policy Statement of the President of the Nuclear Division, the goal of the FPL Quality Assurance Program is to maintain quality levels in an effective and efficient manner, and to assure the high degree of functional integrity and reliability of nuclear safety related structures, systems, and components. To meet this goal, the following objectives of the FPL Quality Assurance Program have been defined:

a. Define through documented procedures and instructions the quality activities that apply to the design, fabrication, procurement, modification, testing, operation, refueling, maintenance, and repair of nuclear power plants;

b. Establish, assign, and document the responsibilities for those activities affecting quality of safety related structures, systems, and components;

c. Establish confidence that the design, fabrication, modification, and operation of nuclear power generation facilities are performed in a manner consistent with FPL policies by assuring activities affecting quality are performed by responsible personnel;

d. Apprise management of unresolved problems and trends which could have a significant effect on nuclear power plant safety; and

e. Prevent schedule delays and high cost due to poor quality.

2.2.2 Program Documentation

The Topical Quality Assurance Report, which defines the policy, goals, objectives, responsibilities and interfaces regarding the Quality Assurance Program, shall be contained in the FPL Quality Assurance Manual, and used as guidance for the development of Quality Instructions. Revisions to the Topical Quality Assurance Report will be made, as needed, to reflect current FPL program requirements and descriptions of activities. These revisions shall be made in accordance with a Quality Instruction. If a program reflects a reduction of the commitments from the baseline documents contained in Appendix C, the revision shall be submitted to and approved by the NRC prior to implementation.

In all other cases, amendments to the Topical Quality Assurance Report will be submitted to the NRC to reflect implemented program revisions on an annual or more frequent basis.

Each department head shall have the responsibility for implementation of the Quality Assurance Program, which includes compliance with procedure requirements applicable to the department. In addition, each department head shall be responsible for the preparation, approval, and distribution of Quality Instructions, operating procedures, testing procedures, or other instructions where further guidance is necessary for implementation of the Quality Assurance Program requirements within the department. Quality Instructions shall be reviewed by the Quality Assurance Department at each revision.

2.2.3 Structures, Systems, and Components

The requirements of the FPL Quality Assurance Program shall apply to nuclear safety related structures, systems, and components, as defined in the SAR. Safety related structures, systems, and components are listed as those necessary to assure the integrity of the reactor coolant boundary, the capability to shutdown the reactor and maintain it in a safe shutdown condition, or the capability to prevent or mitigate the consequences of accidents which could result in off-site exposures comparable to the guideline exposures of 10 CFR 100.

Control over activities affecting the quality of safety related structures, systems, and components shall be to the extent consistent with their importance to safety. Such control shall include use of appropriate equipment, establishment of suitable environmental conditions, and assurance that all prerequisites for a given activity have been satisfied. The Program shall provide for controls over special processes and skills necessary to attain the required quality, and the need for verification of quality by inspection and test.

2.2.4 Participating Organizations

The FPL organizations with responsibilities for activities affecting quality of nuclear safety related structures, systems, and components are identified in TQR 1.0, which also briefly describes their assigned responsibilities.

Florida Power & Light Company may delegate activities to contractor organizations and equipment vendors. Delegated activities are subject to the external organization's FPL approved Quality Assurance Program or the FPL Quality Assurance Program, or some FPL approved combination thereof.

However, FPL shall retain overall responsibilities for the Quality Assurance Program. Procurement documents shall define the scope of delegated activities, as well as Quality Assurance Program requirements that shall govern these activities.

The Quality Assurance Department shall review and approve the Quality Assurance Program governing contracted activities prior to award of contract except for activities for which the output is of a conceptual and/or prototype nature. In all cases, final approval shall occur at a point in the process to ensure that the output complies with the requirements of the FPL approved Quality Assurance Program. The object of this review shall be to verify that the program is in compliance with the applicable requirements of Appendix B, 10CFR50, and ANSI N45.2. Audits shall be conducted periodically to verify the acceptable implementation of the contractor's FPL approved Quality Assurance Program governing delegated activities. The Quality Assurance Department is responsible for conducting these audits. The initial review and periodic audits shall be performed by qualified Quality Assurance Department personnel, and as appropriate, by technical specialists from other FPL departments and contractor organizations.

2.2.5 Indoctrination and Training

A program shall be established and maintained for quality assurance indoctrination, and for training which assures that the required level of personnel competence and skill is achieved and maintained in the performance of activities affecting quality. Instructions shall delineate the requirements for an indoctrination program to assure that personnel responsible for performing activities affecting quality are instructed in the purpose, scope, and implementation of the manuals, instructions, and procedures and that compliance to these documents is a mandatory requirement.

The head of each department is responsible to assure that personnel performing activities affecting quality receive Quality Assurance Indoctrination (QAI). QAI may be provided through plant access training, QAI conducted by the department, or by requesting the Quality Assurance Department to provide QAI. QAI shall include the following as a minimum.

a. **Review the role of the Nuclear Regulatory Commission in licensing and inspection commercial nuclear plants, review specifics with respect to our plants.**

b. **Explain how each department at FPL has responsibilities in the FPL QA Program and why it is not solely a function of the QA and QC departments. Explain the role of the QA and QC departments.**

c. **Introduce how FPL's QA Program is documented, (TQAR, Quality Instructions, procedures, etc.). Instruct personnel in the purpose, scope and implementation of the manuals, instructions, and procedures and that compliance to these documents is mandatory.**

Instructions shall also require the head of each department to be responsible for a training plan which assures that personnel performing activities affecting quality are trained **in applicable Quality Instructions and other procedures and** in the principles and techniques of the activity being performed. This training shall maintain the proficiency of personnel in the skills necessary through retraining, requalification or reexamination, as appropriate. This training shall be conducted to reflect significant procedure changes, or plant modifications which significantly affect the operation of the department. When personnel are assigned to perform their functions under the direction of personnel from other than their home department, the department head of the organization providing direction is responsible for the indoctrination and training of personnel who perform activities under their direction. Instructions shall specify the requirements for documenting indoctrination and training sessions, including a course description, attendance, location, and date. Records shall contain sufficient information to identify persons in attendance with the corresponding lesson plans.

2.2.6 Management Participation

In addition to the involvement of department heads in implementing the Quality Assurance Program within their departments and the involvement of the Director Nuclear Assurance and the Supervisor Performance Assessment in the development, coordination, and review of the Program, the Company Nuclear Review Board (CNRB) shall be apprised of the status and adequacy of the Quality Assurance Program on a periodic basis. The following actions shall be instituted to assure that the CNRB remains informed and meets its Program responsibilities:

a. The CNRB shall review a summary of the results of management level Quality Assurance audits of FPL Departments;

b. The Quality Assurance Department shall periodically, but not less than quarterly, circulate reports of activities to members of the CNRB and affected department heads. The reports may include such items as the status of audits, a summary of audit findings, the status of development projects, and descriptions of policy matters or problems requiring management attention;

c. The CNRB shall review the status of the Quality Assurance Program on a semiannual basis. The review will include assessment of the Program goals, objectives, and accomplishments;

d. Periodic audits of the Quality Assurance Department and Program shall be conducted by an independent audit group under the direction of the Director Nuclear Assurance. This audit group shall employ FPL audit procedures and shall distribute the audit report to the Director Nuclear Assurance, and to the CNRB for review of findings and corrective action. Auditor certifications of independent audit teams will be retained by the Quality Assurance Department.

The programs of contractor organizations that perform activities affecting quality shall be reviewed by Quality Assurance to assure that their management regularly reviews the status and adequacy of that part of the FPL Quality Assurance Program which they are executing.

2.3 RESPONSIBILITIES

2.3.1 Each direct report of the President, Nuclear Division and Department Heads of organizations supporting the Nuclear Division shall be responsible for:

1. Reviewing changes to the FPL QA Manual and determining the need for departmental instructions, revising existing instructions, and approving instructions;

2. Controlling distribution and coordinating the use of the instructions with affected organizations and functions;

3. Submitting Quality Assurance Indoctrination (QAI) lesson plans to the Director Nuclear Assurance for approval to conduct their own QAI.

2.3.2 The Director Nuclear Assurance has overall responsibility for:

1. Development, coordination, and periodic reviews of the status and adequacy of the FPL Quality Assurance Program;

2. Reviewing Regulatory Guides, codes, SAR document commitments and standards for impact on the Quality Assurance program and recommending appropriate program changes;

3. Establishing, conducting, reviewing and authorizing the implementation of FPL's requirements for QAI;

4. Coordinating revisions to the Topical Quality Assurance Report.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

4.1 GENERAL REQUIREMENTS

Procurement of items and services shall be performed in accordance with procedures and instructions which assure that applicable regulatory requirements, design bases, code requirements, and other requirements necessary to assure quality shall be included or invoked by reference in the procurement document. These procedures and instructions shall delineate the sequence of actions to be accomplished in the preparation, review, approval, and control of procurement documents. Changes to procurement documents shall be subjected to the same degree of control as utilized in the preparation of the original documents.

4.2 IMPLEMENTATION

4.2.1 Procurement Document Provisions

Quality Instructions shall identify the responsibilities and actions required of the organizations originating, reviewing, approving, and controlling procurement documents. These instructions shall require the procurement documents to specify:

a. The scope of work to be performed;

b. Technical requirements (by specifying or referencing) which shall include the applicable components and materials identification requirements, drawings, specifications, procedures, instructions, codes, and regulations and provide for identification of applicable test, inspection and acceptance requirements, or special process instructions;

c. Quality Assurance Program requirements to be imposed on contractors which shall include the applicable portions of 10 CFR 50, Appendix B;

d. Right of access which provides, as appropriate, for access to contractor facilities and records for inspection or audit by FPL or its designated representative, and to access for events such as witness and hold points;

e. The documentation required to be prepared, maintained, and/or submitted to FPL or its representative for review, approval, or historical record. The time of submittal of this documentation and the retention and disposition of Quality Assurance Records which will not be delivered to FPL shall be prescribed.

Consideration shall be given to the need for special requirements in the preparation and review of procurement documents. Procedures and instructions shall be prepared and implemented for special on-site handling or storage requirements. The receiving department shall ensure on-site implementation of the special handling, shipping, and storage requirements for items received and controlled by their organization.

Special handling, preservation, storage, cleaning, packaging, and shipping requirements shall be specified, as appropriate, in the design documents or purchase orders. The requirements established in the design documents or purchase orders shall be consistent with industry accepted standards, the importance of equipment or material to nuclear safety, and the material or equipment's sensitivity to damage. The preparation of these design documents or purchase orders may be delegated by FPL to other organizations.

4.2.2 Procurement Document Review

Procurement documents shall be reviewed for correctness, and inspectability and controllability of quality requirements in accordance with Quality Instructions to assure that the appropriate provisions of Section 4.2.1 are included. This review shall be documented and performed by designated personnel who have been trained and qualified in quality assurance practices and concepts. These reviewers shall have access to pertinent information and have an adequate understanding of the quality and technical requirements and intent of the procurement documents.

Spare or replacement parts for safety related structures, systems, and components are subject to technical or quality requirements equivalent to, or better than, those used for the original equipment.

Changes to procurement documents, whether initiated by FPL or their representative, are subjected to the same degree of control as that utilized in the preparation of the original document.

4.2.3 Selection of Procurement Sources

It shall be verified that the procurement document has been reviewed and approved, and that the supplier has been approved prior to issuing the purchase order for safety related materials or services. Verbal purchase orders shall be made in accordance with TQAR Appendix C exceptions to ANSI N45.2.13. Supplier approval is not necessary if the important characteristics of the item can be verified by inspection or test.

The overall procurement requirements, including those related to planning, bid evaluation, and review and concurrence of suppliers Quality Assurance programs, are described in Quality Instructions.

4.3 RESPONSIBILITIES

4.3.1 Direct reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division originating a procurement requisition shall be responsible for:

a. Clearly describing the technical and quality considerations for the procurement of items or services;
b. Specifying any special requirements;
c. Specifying documentation required from the supplier;
d. Specifying special handling, preservation, storage, cleaning, packaging, and shipping requirements, as appropriate.

4.3.2 The Vice President Nuclear Engineering is responsible for:

a. Performing technical evaluations to verify and/or establish technical and quality requirements for permanent and temporary power plant items and services;

b. Reviewing technical and quality requirements contained in procurement documents and changes thereto to assure that ordering requirements are technically correct and complete for items and services as specified in 4.2.1;

c. Evaluating the interchangeability of items that are not identical to what is currently installed.

4.3.3 The Director Nuclear Assurance is responsible for:

a. Assisting in the resolution of quality requirements;

b. Approving suppliers for safety related procurement and commercial grade item procurement (when applicable);

c. Identifying surveillance witness and/or hold points at the supplier's facility for safety related procurement when supplier QA program is relied upon and programmatic deficiencies dictate;

d. Performing supplier surveillance.

4.3.4 The ~~Manager Nuclear Procurement & Logistics~~ **Director Nuclear & Power Generation Materials Operation and/or the Director Procurement & Contracts** or, for nuclear fuel procurement only, the Vice President Nuclear Engineering is responsible for: **(R1011)**

a. Incorporating requisition technical and quality requirements into the procurement documents;

b. Notifying Nuclear Assurance of discrepancies and/or changes in supplier activities which may conflict with the work scope of Nuclear Assurance approved suppliers;

c. Reviewing each procurement document to ensure that it is correct, in accordance with Nuclear Assurance approved supplier work scope and restrictions (when applicable) and the originating procurement requisition;

d. Referencing and attaching appropriate Quality Assurance Program requirements, as referenced on respective procurement requisitions, requests for bid proposals, purchase orders and contracts;

e. Verifying that the procurement document has been reviewed and approved and issuing procurement documents to suppliers, as approved by FPL Nuclear Assurance when supplier QA programs are required;

f. Maintaining traceability of procurement documents until stored in an approved storage facility as a record.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

5.1 GENERAL REQUIREMENTS

Activities affecting quality of nuclear safety-related structures, systems, and components shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. These documents shall include appropriate quantitative criteria such as dimensions, tolerances, and operating limits, and qualitative criteria such as comparative workmanship samples, to assure that the quality assurance activity has been satisfactorily accomplished.

5.2 IMPLEMENTATION

5.2.1 Quality Assurance Program Documents

The FPL Quality Assurance Manual described in TQR 2.0 contains the Topical Quality Assurance Report which complies with the criteria of 10 CFR 50, Appendix B. Quality Instructions provide direction for activities affecting quality. The Quality Assurance Department reviews and comments on Quality Instructions written by other departments. Comments concerning compliance with corporate Quality Assurance commitments and regulatory requirements are resolved prior to issuance. The Quality Assurance Department receives controlled copies of Quality Instructions issued by other departments.

5.2.2 Procedures and Instructions

Instructions and procedures for activities affecting quality shall be prepared, reviewed, and approved in accordance with written Quality Instructions.

For plant operations, on-site plant procedures shall be prepared, reviewed, and approved in accordance with ~~written instructions~~ **Quality Instructions** which ~~includes~~ **include** ~~a review for concurrence by Quality Assurance or Quality Control personnel and~~ provisions for temporary changes and temporary procedures. ~~These~~ **On-site** plant procedures include operating procedures, off-normal and emergency procedures, test procedures, and calibration procedures. Also included are maintenance and repair procedures for subcontracted maintenance and repair activities which are outside the normal scope of plant craft capability. Temporary procedures may be issued during testing, refueling, maintenance, modifications, unusual situations not within the scope of normal procedures, and for short periods when the plant, system or component is performing in a manner not covered by existing detailed procedures or has been modified in such a manner that portions of existing procedures do not apply. **Organizations generating on-site procedures shall assure that the applicable requirements of the Quality Assurance program and other regulatory requirements are included. (R992)**

Quality Assurance or Quality Control shall review significant changes to operating procedures prior to issue to assure that quality assurance and regulatory requirements are met. Quality Assurance or Quality Control shall review other on-site plant procedures periodically and randomly through audits and surveillances, and situationally through QA membership on the FRG/PNSC. The purpose of these reviews is to ascertain that the necessary quality requirements are included. Quality Assurance shall monitor condition report trend reports to determine the need to restore in-line review of procedures by Quality Assurance or Quality Control. (R992)

Contractors shall be required to have Quality Assurance Programs which contain written instructions for preparation, review, and approval of procedures, instructions, and drawings affecting quality. In addition, Contractor's site procedures and Quality Control inspection procedures shall be approved by the Plant General Manager, or designee, following reviews by Quality Assurance or Quality Control personnel to assure compliance with Corporate commitment and regulatory requirements.

During the design, modification, and procurement phases, the Architect/Engineer or other contractors may be delegated responsibility for maintaining, issuing and verifying the implementation of appropriate program documents. In this case, Quality Assurance or Quality Control audit or surveillance activities shall assure that such measures are established and implemented. Contractor programs shall clearly delineate the actions to be accomplished in the preparation, review and control of instructions, procedures and drawings, and the methods for complying with the appropriate criteria of 10 CFR 50, Appendix B.

5.2.3 Drawings

The design organization is responsible for review and approval of drawings. For delegated design activities, the Nuclear Engineering Department may approve changes to drawings. The technical control of drawings, i.e., review and approval of the drawing and all changes thereto shall be governed by procedures. A means shall be developed and updated as required to identify approved drawings and revisions thereto. A Master Drawing List is the normal means used for this.

5.2.4 Acceptance Criteria

Quality Instructions shall require that instructions, procedures, and drawings affecting quality include adequate quantitative and qualitative acceptance criteria, as appropriate, for determining satisfactory work performance and quality compliance. These acceptance criteria requirements apply to important activities such as design, operations, test control, inspection, and plant modifications.

5.3 RESPONSIBILITIES

5.3.1 Each direct report to the President Nuclear Division and Department Heads of organizations supporting the Nuclear Division is responsible for:

a. Establishment of a documented system for the preparation, review, approval and revision of procedures. This system shall comply with regulatory requirements, the applicable Plant Technical Specifications, applicable plant Updated Final Safety Analysis Report, and Topical Quality Requirements.

5.3.2 The Director Nuclear Assurance is responsible for:

a. Review and concurrence of procedures affecting quality in accordance with Paragraph 5.2.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

7.1 GENERAL REQUIREMENTS

Measures shall be established to assure that items or services purchased by, or for FPL conform to the requirements of the procurement document. These measures shall include documented evidence of source selection, verification activities and examination of items or services to assure compliance with the procurement document. The effectiveness of the control of quality by contractors and subcontractors shall be assessed at intervals consistent with the importance, complexity, and quality of the product or service.

7.2 IMPLEMENTATION

7.2.1 Evaluation of Suppliers

Procurement source evaluation and selection measures shall be specified in Quality Instructions which shall identify the responsibility of qualified individuals for determining supplier capability. The evaluation may require integrated action involving Quality Assurance and one or more organizations based upon the item or service being procured. This evaluation is to ensure that the FPL contractors comply with the applicable portions of 10 CFR 50, Appendix B. Documented evidence of the evaluation, and the acceptance of the contractor's quality program and procedures shall be retained in the Quality Assurance Department files. The determination of supplier approval shall be based on such factors as prior performance, historical quality performance data, source surveys or audits, and evaluation of the supplier's Quality Assurance Program. The basis shall be consistent with the importance, complexity, and quality required for the items or services involved.

7.2.2 Verification Activities

Quality Instructions shall define the requirements for verification activities such as surveillance, inspection, or audit to assure conformance of procured items and services to identified requirements. These verification activities shall be performed in accordance with written procedures, procurement documents and their references, which specify the documentation required and the characteristic or process to be witnessed, inspected, verified, or accepted. FPL verification activities shall be accomplished by qualified personnel to verify that the supplier complies with quality requirements, and depending on the importance/complexity, shall be performed on those items where verification of procurement requirements cannot be determined upon receipt.

7.2.3 Receiving Inspection

Quality Instructions shall delineate requirements and responsibilities for the performance of receiving inspection. This inspection shall verify that suppliers have fulfilled their contractual obligation and that the procured items meet the appropriate quality requirements. Receipt inspections shall be planned. The receipt inspection plans shall identify the characteristics to be verified and the documentation to be reviewed at receipt inspection. **Personnel performing receipt inspection required by the Quality Assurance Program shall be certified in accordance with the requirements of ANSI N45.2.6-1978.** Receiving inspection shall include, as appropriate: **(R985)**

a. Measures for verifying that the shipment is complete, properly identified, undamaged, and corresponds with the purchase order documentation;

b. Measures for inspection of the item and review of supporting documentation (e.g., mill test reports, NDE reports) as required by the purchase documents;

c. Measures for disposition of items to inspection instructions;

d. Measures for identifying and controlling items including identification of inspection status prior to release from the receiving inspection area;

e. Measures to ascertain that inspection records or Certificates of Conformance are available prior to release;

f. Measures verifying completion of Commercial Grade Item dedication requirements.

7.2.4 Supplier Furnished Records

Records required to be furnished by the supplier shall be specified in the procurement document. Certifications or documentation verifying conformance provided by the supplier shall identify the specific procurement requirements met (either by reference to the purchase order or by referenced requirements therein). Such certification shall identify any procurement requirements which have not been met and provide a description of those nonconformances dispositioned "accept as is" or "repair".

7.2.5 Release for Use or Installation

a. Documentary evidence that material and equipment conforms to the procurement requirements shall be available at the plant site prior to installation or use of such material or equipment.

b. This documentary evidence shall be retained at the plant site and shall be sufficient to identify the specific requirements such as codes, standards, or specifications met by the purchased material and equipment.

c. Where not precluded by other requirements, such documentary evidence may take the form of written certificates of compliance which identify the requirements met by the items, providing means are available to verify the validity of such certifications (e.g., the supplier has a quality assurance program which has been audited and approved by Florida Power and Light and the supplier is currently on the Approved Suppliers List).

d. If documentary evidence is not available on site and installation is desired prior to receipt of that evidence, the item, material, or equipment may be installed, but not placed into service, provided the item, material, or equipment:

1) is isolated from other plant equipment so as not to impact plant safety and,

2) is controlled as a nonconforming item in accordance with the requirements of TQR 15.0

7.3 RESPONSIBILITIES

7.3.1 Direct reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division are responsible for:

a. Determining the methods of acceptance for services requested by them;
b. The performance of the acceptance methods selected, when assigned to them.

7.3.2 The Vice President Nuclear Engineering is responsible for:

a. Requesting that Nuclear Assurance perform a supplier evaluation;
b. Determining the methods of acceptance for items and services.

7.3.3 The Director Nuclear Assurance is responsible for:

a. Assuring that evaluations of suppliers are performed and the results documented in accordance with approved Quality Instructions;

b. Determining the methods of source verification~~;~~.

~~c. Performing receipt inspections in accordance with approved Quality Instructions;~~ **(R985)**

7.3.4 The ~~Site Vice President~~ **Manager Nuclear Procurement & Logistics**is responsible for: **(R985)**

a. Requesting that Nuclear Assurance perform a supplier evaluation;
b. Examining items for shipping damage upon receipt;
c. Performing receipt inspection in accordance with approved Quality Instructions.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

7.1 GENERAL REQUIREMENTS

Measures shall be established to assure that items or services purchased by, or for FPL conform to the requirements of the procurement document. These measures shall include documented evidence of source selection, verification activities and examination of items or services to assure compliance with the procurement document. The effectiveness of the control of quality by contractors and subcontractors shall be assessed at intervals consistent with the importance, complexity, and quality of the product or service.

7.2 IMPLEMENTATION

7.2.1 Evaluation of Suppliers

Procurement source evaluation and selection measures shall be specified in Quality Instructions which shall identify the responsibility of qualified individuals for determining supplier capability. The evaluation may require integrated action involving Quality Assurance and one or more organizations based upon the item or service being procured. This evaluation is to ensure that the FPL contractors comply with the applicable portions of 10 CFR 50, Appendix B. Documented evidence of the evaluation, and the acceptance of the contractor's quality program and procedures shall be retained in the Quality Assurance Department files. The determination of supplier approval shall be based on such factors as prior performance, historical quality performance data, source surveys or audits, and evaluation of the supplier's Quality Assurance Program. The basis shall be consistent with the importance, complexity, and quality required for the items or services involved.

7.2.2 Verification Activities

Quality Instructions shall define the requirements for verification activities such as surveillance, inspection, or audit to assure conformance of procured items and services to identified requirements. These verification activities shall be performed in accordance with written procedures, procurement documents and their references, which specify the documentation required and the characteristic or process to be witnessed, inspected, verified, or accepted. FPL verification activities shall be accomplished by qualified personnel to verify that the supplier complies with quality requirements, and depending on the importance/complexity, shall be performed on those items where verification of procurement requirements cannot be determined upon receipt.

7.2.3 Receiving Inspection

Quality Instructions shall delineate requirements and responsibilities for the performance of receiving inspection. This inspection shall verify that suppliers have fulfilled their contractual obligation and that the procured items meet the appropriate quality requirements. Receipt inspections shall be planned. The receipt inspection plans shall identify the characteristics to be verified and the documentation to be reviewed at receipt inspection. Personnel performing receipt inspection required by the Quality Assurance Program shall be certified in accordance with the requirements of ANSI N45.2.6-1978. Receiving inspection shall include, as appropriate:

a. Measures for verifying that the shipment is complete, properly identified, undamaged, and corresponds with the purchase order documentation;

b. Measures for inspection of the item and review of supporting documentation (e.g., mill test reports, NDE reports) as required by the purchase documents;

c. Measures for disposition of items to inspection instructions;

d. Measures for identifying and controlling items including identification of inspection status prior to release from the receiving inspection area;

e. Measures to ascertain that inspection records or Certificates of Conformance are available prior to release;

f. Measures verifying completion of Commercial Grade Item dedication requirements.

7.2.4 Supplier Furnished Records

Records required to be furnished by the supplier shall be specified in the procurement document. Certifications or documentation verifying conformance provided by the supplier shall identify the specific procurement requirements met (either by reference to the purchase order or by referenced requirements therein). Such certification shall identify any procurement requirements which have not been met and provide a description of those nonconformances dispositioned "accept as is" or "repair".

7.2.5 Release for Use or Installation

a. Documentary evidence that material and equipment conforms to the procurement requirements shall be available at the plant site prior to installation or use of such material or equipment.

b. This documentary evidence shall be retained at the plant site and shall be sufficient to identify the specific requirements such as codes, standards, or specifications met by the purchased material and equipment.

c. Where not precluded by other requirements, such documentary evidence may take the form of written certificates of compliance which identify the requirements met by the items, providing means are available to verify the validity of such certifications (e.g., the supplier has a quality assurance program which has been audited and approved by Florida Power and Light and the supplier is currently on the Approved Suppliers List).

d. If documentary evidence is not available on site and installation is desired prior to receipt of that evidence, the item, material, or equipment may be installed, but not placed into service, provided the item, material, or equipment:

1) is isolated from other plant equipment so as not to impact plant safety and,

2) is controlled as a nonconforming item in accordance with the requirements of TQR 15.0

7.3 RESPONSIBILITIES

7.3.1 Direct reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division are responsible for:

a. Determining the methods of acceptance for services requested by them;
b. The performance of the acceptance methods selected, when assigned to them.

7.3.2 The Vice President Nuclear Engineering is responsible for:

a. Requesting that Nuclear Assurance perform a supplier evaluation;
b. Determining the methods of acceptance for items and services.

7.3.3 The Director Nuclear Assurance is responsible for:

a. Assuring that evaluations of suppliers are performed and the results documented in accordance with approved Quality Instructions;

b. Determining the methods of source verification.

7.3.4 The ~~Manager Nuclear Procurement & Logistics~~ **Director Nuclear & Power Generation Materials Operation** is responsible for: **(R1012)**

a. Requesting that Nuclear Assurance perform a supplier evaluation;
b. Examining items for shipping damage upon receipt;
c. Performing receipt inspection in accordance with approved Quality Instructions.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

8.1 GENERAL REQUIREMENTS

Materials, parts, and components, including partially fabricated assemblies, shall be identified and controlled as required throughout fabrication, receipt, handling, storage, installation, and use of the item. The identification of the item shall be maintained by heat number, part number, serial number, assigned traceability number, or other suitable means, and shall be physically marked on the item or on records traceable to the item. The object of these controls shall be to prevent the use of non-inspected, incorrect or defective materials, parts, and components.

8.2 IMPLEMENTATION

Quality Instructions shall establish the responsibilities and requirements for the identification, and control of materials, parts and components. The procedures and instructions used by all organizations shall assure that identification and control is maintained throughout fabrication, receipt, handling, storage, installation and use of items. This shall include welding material traceability to the point of consumption. Provisions include:

a. Physical identification shall be used to the maximum extent possible. When physical identification is impractical or insufficient, items shall be physically segregated and identified by batch, lots, etc.;

b. When items are subdivided, their identification shall be maintained by transferring the identification to each of the subdivided parts or their container;

c. Post-installation identification of items that cannot feasibly be physically marked shall be traceable by record verification;

d. Items requiring identification, but whose identification was lost during storage, shall be segregated and documented as nonconforming and dispositioned in accordance with established procedures;

e. Requirements for traceability to appropriate documentation, such as: procurement documents, manufacturing documents, drawings, specifications, inspection and test records, nonconformance or deficiency reports or other Quality Assurance Records, in sufficient detail to preclude any possibility of doubt or confusion concerning the traceability of an item to the documentation, or the documentation to the item;

f. Controls to assure that the correct identification of an item is verified and documented prior to fabrication, receipt, handling, storage, installation and use;

g. Requirements which assure that the method or location of markings are not detrimental to, and do not affect the function or quality of an item; are clear, unambiguous and indelible; are in plain unobstructed view; do not provide conflicts with other requirements; are not obliterated by any surface treatment unless other means of identification are substituted; withstand normal shipping, handling and environmental effects and are able to be retained;

h. Establishment of identification requirements by specifications, drawings, procurement documents, instructions or procedures during initial planning;

i. Requirements to ensure that dedicated Commercial Grade Items are identifiable to the specific component or equipment for which they are dedicated.

FPL may delegate any portion of the implementation of the identification and control program to the Architect/Engineer, Constructor, Nuclear Steam Supply System vendor or other contractors. If delegated, contracts shall require that the contractor establish an identification and control program which meets the requirements of this TQR.

8.3 RESPONSIBILITIES

8.3.1 The Site Vice President has overall responsibility for: **(R996)**

~~a.~~ ~~Assuring that an identification and control system is developed and implemented for items to be utilized within the plant;~~

~~b.~~ ~~Receiving, controlling and ensuring the security of items;~~

~~c.~~ ~~Segregating items until the required receipt inspection is performed;~~

~~d~~ **a.** Assuring the placement of any necessary markings on the items as required by applicable procedures ~~or as requested in accordance with applicable purchase orders, specifications or commercial grade dedication packages~~; and

~~e~~ **b.** Incorporating applicable pre-installation and/or post-installation inspections, tests, and QC hold points (including Commercial Grade Item Dedication requirements) into applicable work control documents.

8.3.2 The Vice President Nuclear Engineering has overall responsibility for:

a. Determining and specifying end use applications for items.

8.3.3 The Manager Nuclear Procurement and Logistics is responsible for: (R996)

a. Assuring that an identification and control system is developed and implemented for items to be utilized within the plant;

b. Receiving, controlling and ensuring the security of items;

c. Segregating items until the required receipt inspection is performed; and

d. Assuring the placement of any necessary markings on the items as required by applicable procedures or as requested in accordance with applicable purchase orders, specifications, or commercial grade dedication packages.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

8.1 GENERAL REQUIREMENTS

Materials, parts, and components, including partially fabricated assemblies, shall be identified and controlled as required throughout fabrication, receipt, handling, storage, installation, and use of the item. The identification of the item shall be maintained by heat number, part number, serial number, assigned traceability number, or other suitable means, and shall be physically marked on the item or on records traceable to the item. The object of these controls shall be to prevent the use of non-inspected, incorrect or defective materials, parts, and components.

8.2 IMPLEMENTATION

Quality Instructions shall establish the responsibilities and requirements for the identification, and control of materials, parts and components. The procedures and instructions used by all organizations shall assure that identification and control is maintained throughout fabrication, receipt, handling, storage, installation and use of items. This shall include welding material traceability to the point of consumption. Provisions include:

a. Physical identification shall be used to the maximum extent possible. When physical identification is impractical or insufficient, items shall be physically segregated and identified by batch, lots, etc.;

b. When items are subdivided, their identification shall be maintained by transferring the identification to each of the subdivided parts or their container;

c. Post-installation identification of items that cannot feasibly be physically marked shall be traceable by record verification;

d. Items requiring identification, but whose identification was lost during storage, shall be segregated and documented as nonconforming and dispositioned in accordance with established procedures;

e. Requirements for traceability to appropriate documentation, such as: procurement documents, manufacturing documents, drawings, specifications, inspection and test records, nonconformance or deficiency reports or other Quality Assurance Records, in sufficient detail to preclude any possibility of doubt or confusion concerning the traceability of an item to the documentation, or the documentation to the item;

f. Controls to assure that the correct identification of an item is verified and documented prior to fabrication, receipt, handling, storage, installation and use;

g. Requirements which assure that the method or location of markings are not detrimental to, and do not affect the function or quality of an item; are clear, unambiguous and indelible; are in plain unobstructed view; do not provide conflicts with other requirements; are not obliterated by any surface treatment unless other means of identification are substituted; withstand normal shipping, handling and environmental effects and are able to be retained;

h. Establishment of identification requirements by specifications, drawings, procurement documents, instructions or procedures during initial planning;

i. Requirements to ensure that dedicated Commercial Grade Items are identifiable to the specific component or equipment for which they are dedicated.

FPL may delegate any portion of the implementation of the identification and control program to the Architect/Engineer, Constructor, Nuclear Steam Supply System vendor or other contractors. If delegated, contracts shall require that the contractor establish an identification and control program which meets the requirements of this TQR.

8.3 RESPONSIBILITIES

8.3.1 The Site Vice President has overall responsibility for:

a. Assuring the placement of any necessary markings on the items as required by applicable procedures; and

b. Incorporating applicable pre-installation and/or post-installation inspections, tests, and QC hold points (including Commercial Grade Item Dedication requirements) into applicable work control documents.

8.3.2 The Vice President Nuclear Engineering has overall responsibility for:

a. Determining and specifying end use applications for items.

8.3.3 The ~~Manager Nuclear Procurement and Logistics~~ **Director Nuclear & Power Generation Materials Operation** is responsible for: **(R1015)**

a. Assuring that an identification and control system is developed and implemented for items to be utilized within the plant;

b. Receiving, controlling and ensuring the security of items;

c. Segregating items until the required receipt inspection is performed; and

d. Assuring the placement of any necessary markings on the items as required by applicable procedures or as requested in accordance with applicable purchase orders, specifications, or commercial grade dedication packages.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

9.1 GENERAL REQUIREMENTS

Measures shall be established to assure that special processes such as welding, heat treating, and nondestructive examination items, are controlled and accomplished by qualified personnel using qualified procedures and equipment in accordance with applicable codes, standards, specifications, criteria, and other special requirements.

9.2 IMPLEMENTATION

Special process requirements shall be included in design outputs and changes thereto. Special process procedures shall be developed, reviewed, approved and controlled, and special process personnel and equipment shall be qualified.

9.2.1 Identification of Special Processes

Special processes are those processes which must be qualified and controlled where quality is highly dependent on close control of process variables or operator skills, and objective verification (inspection, examination or testing) of end quality is difficult.

Special processes identified by applicable codes and standards shall be controlled, qualified, and implemented in accordance with those codes and standards. Examples of special processes include (but are not limited to) welding, heat treating, and nondestructive examination. Others, (e.g., flushing, protective coating, plating applications and nuclear cleaning) should be reviewed to determine if they are special processes.

9.2.2 Procedure Qualification and Control

Process control procedures written by FPL organizations or their contractors shall be used and qualified as required by applicable specifications, codes, or standards.

Where FPL assigns work to outside contractors, the contractors shall make their procedures and personnel qualifications available for review to FPL prior to the start of work. The Architect/Engineer, Nuclear Steam Supply System vendor, or other organization designated by FPL shall be responsible for the evaluation and acceptance of on-site contractor special process procedures, and shall interface with the appropriate FPL department, as necessary, to resolve review comments with the contractor. The contractor shall also be responsible for the control and approval of sub-contractor procedures.

Special process procedures shall be:

a. Sufficiently detailed for a qualified person to perform the technique and achieve the desired results;

b. Reviewed and approved prior to use to ensure the procedure complies with applicable codes, standards, and specifications, and that specified materials, equipment, and techniques are suitable for the intended application;

c. Qualified prior to, or during initial use.

Special process procedures and revisions thereto which specify acceptance criteria (other than those identified in the ASME code) shall have the concurrence of the acceptance criteria by Nuclear Engineering prior to issuance and use.

9.2.3 Personnel Qualification and Certification

Procedures or instructions shall specify personnel qualification and certification requirements. Personnel responsible for the performance and verification of special processes shall be trained, tested, and certified as required by applicable specifications, codes and standards. Requirements for the period of certification, retesting, and recertification of personnel shall also be specified. Contractors shall qualify personnel and maintain records of qualified personnel in accordance with applicable codes, standards, specifications, and contract or procurement document requirements.

9.2.4 Control of Equipment

Equipment that must be of a specific type, range, or accuracy to provide conformance to specified requirements shall be controlled to ensure that it is qualified, maintained, and calibrated in accordance with those requirements.

9.2.5 Special Process Records

Records shall provide objective evidence that special processes were performed in compliance with approved procedures by qualified personnel and equipment.

Results of nondestructive examinations shall be documented and shall be evaluated for acceptance in accordance with applicable specifications, codes and standards by an individual who is certified in the applicable method.

Records shall also be maintained for verification activities when required by procedure, code or specification. For contracted work, these records shall be retained by the vendor or supplied to FPL as required by contract or purchase order. If records are to be retained by the vendor, the contract or purchase order shall specify the retention period and instructions for final disposition of such records.

9.3 RESPONSIBILITIES

9.3.1 Direct reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division involved in special process activities are responsible for:

a. Ensuring that special process procedures used by their department are reviewed, approved, controlled, and are qualified prior to or during initial use;

b. Ensuring that special process personnel in their department are qualified and certified;

c. Ensuring that records associated with special processes under their control are reviewed and maintained;

d. Performing special process inspections, examinations, and activities, when assigned to their department, as required by applicable codes, standards, criteria, or other special requirements identified;

e. Ensuring that work documents under their control contain adequate requirements for the identification and control of special processes;

f. Ensuring special process procedures and revisions which specify acceptance criteria (other than identified in the ASME code) have Nuclear Engineering concurrence of acceptance criteria prior to use;

g. Ensuring nondestructive examination documents are reviewed for accuracy and adequacy;

h. Ensuring that welding activities requiring a qualified program are implemented in accordance with the welding program developed by Nuclear Engineering.

9.3.2 The Vice President Nuclear Engineering is responsible for:

a. Determining (as requested) if a specific activity constitutes a special process;

b. Identifying applicable codes, standards, specifications, criteria, and other requirements related to special processes;

c. Preparation, qualification, issuance, and control of Visual Test (VT) and Nondestructive Examination (NDE) procedures, instructions, and technique sheets ~~for all ASME Section XI examination activities;~~

d. Direction, including technical direction to all personnel, of the welding program to meet the requirements of applicable codes and standards. This shall include the development, maintenance, and control of a welding program;

e. Review and approval of contractor welding programs.

9.3.3 The Site Vice President is responsible for:

a. Welding activities performed at the site including issuance and control of weld documentation packages, welding material and equipment;

b. Maintaining a current report of qualified welders and weld operators and assigning welder symbols;

c. Ensuring that the Authorized Nuclear Inspector/Authorized Nuclear Inservice Inspector (ANI/ANII) is permitted access to all parts of the plant site or supplier facilities while work on an item or system is being performed that concerns the welding fabrication, modification, repair, or replacement of the item or system; including inspections, examinations, and tests.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

10.1 GENERAL REQUIREMENTS

A program for inspection shall be established and executed by or for FPL to verify conformance with the documented instructions, procedures and drawings for accomplishing an activity. Inspections shall be performed by individuals or groups other than those who performed the activity being inspected. Examinations, measurements and tests of materials or products processed shall be performed for each work operation, where necessary, to assure conformance to established requirements. If direct inspection of processed materials or products is impossible or disadvantageous, indirect control by surveillance or monitoring shall be provided. Mandatory inspection, witness, or hold points beyond which work shall not proceed without the consent of FPL or a designated representative shall be indicated in the appropriate documents.

10.2 IMPLEMENTATION

10.2.1 Inspection Program

For plant operations, maintenance, or modification activities, a program for on-site inspection of activities affecting quality shall be established. This program shall ensure the performance of inspections, surveillance and monitoring of plant activities including operations, maintenance or modifications as required by established plans, schedules and/or procedurally required inspection, witness or hold points. In all cases, the personnel performing the inspection shall be independent of the group performing the work.

For preoperational start-up and testing of plant modifications, Nuclear Division personnel may report functionally to the manager responsible for the start-up and testing and establish plans, schedules and procedurally required inspection, witness or hold points. In all cases, the personnel performing the inspection shall be independent of the group performing the work.

~~Protection & Control Systems~~ **Station Area Operations** personnel may perform inspections of equipment within their purview during operations. Inspections shall be performed in accordance with approved, written procedures by qualified personnel. **(R999)**

Quality Instructions shall be written which delineate the requirements and responsibilities for the performance of inspections.

10.2.2 Inspection Plans and Schedules

Documented inspection plans may be either a separate document or an integral part of work instruction documents. The plans shall be based on design specifications, procurement documents, drawings, other specifications or previous experience, as appropriate. The frequency and timing of inspections shall be scheduled according to the activities being conducted and to assure that sufficient time and resources are available, and inspections are not inadvertently omitted or bypassed.

Inspection planning should include a review for the acceptability of sampling. If sampling is permitted, the sampling procedure shall be based on nationally recognized standard practices.

10.2.3 Inspection Personnel

Inspections shall be performed by individuals other than those who performed or directly supervised the activity being inspected. Inspection personnel shall have current qualifications and certifications in accordance with appropriate codes, standards and/or company training programs. These qualifications and certifications shall be documented.

Prior to performing inspections, inspection personnel shall have access to the drawings, procedures, specifications or other documented criteria necessary for performance of the inspection.

10.2.4 Inspection Procedures

Required inspection, surveillance or monitoring activities shall be performed and documented according to written, approved instructions or procedures.

a. Inspection procedures, instructions or checklists shall contain the following:

- o Identification of characteristics to be inspected;
- o Identification of the individual or groups responsible for performing the inspection;
- o Acceptance criteria or reference to the acceptance criteria;
- o A description of the method of inspection;
- o Verification of completion and certification of inspection.

b. Inspection records shall identify:

- o Inspector or data recorder;
- o Method or type of observations;
- o Test or inspection results;
- o Statement of acceptability;
- o Date of observation;
- o Deficiencies and nonconformances, and the action taken in connection with these deficient conditions, either by inclusion or by reference to other documents;

c. Inspection procedures shall be reviewed by Nuclear Assurance personnel to determine the need for an independent inspection and the degree and method if such an inspection is required, and to assure the identification of inspection personnel and the method of documentation of inspection results;

d. Written approved instructions shall specify surveillance or monitoring of processing methods, or testing and operation of equipment when inspection is impossible, inaccessible or not applicable;

e. Modification, repair, replacement or rework items shall be inspected in accordance with original inspection requirements or acceptable alternatives.

10.2.5 Inspection, Witness, and Hold Point Identification

Appropriate inspection, witness or hold points shall appear in process documents (e.g., construction, testing, operating and maintenance procedures). These process procedures are subject to the review of the Quality Control organization for adequacy of inspection, witness, and hold points.

Mandatory hold points shall be identified in process documents when witnessing and inspecting must be performed and signed-off by the responsible personnel before work can proceed.

FPL procurement documents shall indicate FPL witness or hold points applicable prior to during, or after the manufacture of an item or the performance of a service. A distinction shall be made between witness points and mandatory hold points.

10.3 RESPONSIBILITIES

10.3.1 Direct Reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division that perform inspection activities are responsible for:

a. Implementation of a program for inspection activities;

b. Ensuring that this program verifies compliance with applicable portions of Technical Specifications, SAR requirements, procurement documents, other operating license requirements and the QA Manual;

c. Ensuring coordination with QC for incorporation of QC inspection and hold points into procedures and work documents;

d. Ensuring that inspections are not inadvertently omitted or bypassed;

e. Ensuring that personnel assigned to perform inspections are appropriately qualified and certified;

f. Ensuring inspection procedures are reviewed by Nuclear Assurance personnel to determine the need for an independent inspection and the degree and method if such an inspection is required, and to ensure the identification of inspection personnel and the method of documentation of inspection results.

10.3.2 The Director Nuclear Assurance is responsible for:

a. Implementation of a program for inspection and surveillance activities;

b. Ensuring that required QC inspections are incorporated into inspection/test/ maintenance procedures, design change documents, and work process control documents;

c. Ensuring that inspections and surveillances are correctly performed and documented;

d. Reviewing inspection procedures to determine the need for an independent inspection and the degree and method if such an inspection is required, and to ensure the identification of inspection personnel and the method of documentation of inspection results.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

10.1 GENERAL REQUIREMENTS

A program for inspection shall be established and executed by or for FPL to verify conformance with the documented instructions, procedures and drawings for accomplishing an activity. Inspections shall be performed by individuals or groups other than those who performed the activity being inspected. Examinations, measurements and tests of materials or products processed shall be performed for each work operation, where necessary, to assure conformance to established requirements. If direct inspection of processed materials or products is impossible or disadvantageous, indirect control by surveillance or monitoring shall be provided. Mandatory inspection, witness, or hold points beyond which work shall not proceed without the consent of FPL or a designated representative shall be indicated in the appropriate documents.

10.2 IMPLEMENTATION

10.2.1 Inspection Program

For plant operations, maintenance, or modification activities, a program for on-site inspection of activities affecting quality shall be established. This program shall ensure the performance of inspections, surveillance and monitoring of plant activities including operations, maintenance or modifications as required by established plans, schedules and/or procedurally required inspection, witness or hold points. In all cases, the personnel performing the inspection shall be independent of the group performing the work.

For preoperational start-up and testing of plant modifications, Nuclear Division personnel may report functionally to the manager responsible for the start-up and testing and establish plans, schedules and procedurally required inspection, witness or hold points. In all cases, the personnel performing the inspection shall be independent of the group performing the work.

Station Area Operations personnel may perform inspections of equipment within their purview during operations. Inspections shall be performed in accordance with approved, written procedures by qualified personnel.

Quality Instructions shall be written which delineate the requirements and responsibilities for the performance of inspections.

10.2.2 Inspection Plans and Schedules

Documented inspection plans may be either a separate document or an integral part of work instruction documents. The plans shall be based on design specifications, procurement documents, drawings, other specifications or previous experience, as appropriate. The frequency and timing of inspections shall be scheduled according to the activities being conducted and to assure that sufficient time and resources are available, and inspections are not inadvertently omitted or bypassed.

Inspection planning should include a review for the acceptability of sampling. If sampling is permitted, the sampling procedure shall be based on nationally recognized standard practices.

10.2.3 Inspection Personnel

Inspections shall be performed by individuals other than those who performed or directly supervised the activity being inspected. Inspection personnel shall have current qualifications and certifications in accordance with appropriate codes, standards and/or company training programs. These qualifications and certifications shall be documented.

Prior to performing inspections, inspection personnel shall have access to the drawings, procedures, specifications or other documented criteria necessary for performance of the inspection.

10.2.4 Inspection Procedures

Required inspection, surveillance or monitoring activities shall be performed and documented according to written, approved instructions or procedures.

a. Inspection procedures, instructions or checklists shall contain the following:

- o Identification of characteristics to be inspected;
- o Identification of the individual or groups responsible for performing the inspection;
- o Acceptance criteria or reference to the acceptance criteria;
- o A description of the method of inspection;
- o Verification of completion and certification of inspection.

b. Inspection records shall identify:

- o Inspector or data recorder;
- o Method or type of observations;
- o Test or inspection results;
- o Statement of acceptability;
- o Date of observation;
- o Deficiencies and nonconformances, and the action taken in connection with these deficient conditions, either by inclusion or by reference to other documents;

c. Inspection procedures shall be reviewed by Nuclear Assurance personnel **or for NDE by Engineering personnel** to determine the need for an independent inspection and the degree and method if such an inspection is required, and to assure the identification of inspection personnel and the method of documentation of inspection results; **(R987A)**

d. Written approved instructions shall specify surveillance or monitoring of processing methods, or testing and operation of equipment when inspection is impossible, inaccessible or not applicable;

e. Modification, repair, replacement or rework items shall be inspected in accordance with original inspection requirements or acceptable alternatives.

10.2.5 Inspection, Witness, and Hold Point Identification

Appropriate inspection, witness or hold points shall appear in process documents (e.g., construction, testing, operating and maintenance procedures). These process procedures are subject to the review of the Quality Control organization ~~**or for NDE by the Engineering organization**~~ for adequacy of inspection, witness, and hold points. **(R987B)**

Mandatory hold points shall be identified in process documents when witnessing and inspecting must be performed and signed-off by the responsible personnel before work can proceed.

FPL procurement documents shall indicate FPL witness or hold points applicable prior to during, or after the manufacture of an item or the performance of a service. A distinction shall be made between witness points and mandatory hold points.

10.3 RESPONSIBILITIES

10.3.1 Direct Reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division that perform inspection activities are responsible for:

a. Implementation of a program for inspection activities;

b. Ensuring that this program verifies compliance with applicable portions of Technical Specifications, SAR requirements, procurement documents, other operating license requirements and the QA Manual;

c. Ensuring that personnel assigned to perform inspections are appropriately qualified and certified. **(R987B)**

~~c. Ensuring coordination with QC for incorporation of QC inspection and hold points into procedures and work documents;~~

~~d. Ensuring coordination with Engineering for incorporation of NDE inspection and holdpoints into procedures and work documents; (R987A)~~

d.~~e.~~ ~~Ensuring that inspections are not inadvertently omitted or bypassed; (R987A)~~

e.~~f.~~ ~~Ensuring that personnel assigned to perform inspections are appropriately qualified and certified;(R987A)~~

f.~~g.~~ ~~Ensuring inspection procedures are reviewed by Nuclear Assurance personnel or for NDE by Engineering personnel to determine the need for an independent inspection/NDE and the degree and method if such an inspection/NDE is required, and to ensure the identification of inspection/NDE personnel and the method of documentation of inspection/NDE results. (R987A)~~

10.3.2 Direct Reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division that plan or execute work activities are responsible for: (R987B)

a. Ensuring that inspections are not inadvertently omitted or bypassed;

b. Incorporating NDE inspection and holdpoints into procedures and work documents as specified by Engineering;

c. Ensuring coordination with QC for incorporation of QC inspection and hold points into procedures and work documents;

d. Ensuring inspection procedures are reviewed by Nuclear Assurance personnel or for NDE by Engineering personnel to determine the need for an independent inspection and the degree and method if such an inspection is required, and to ensure the identification of inspection personnel and the method of documentation of inspection results.

10.3.3 The Director Nuclear Assurance is responsible for: **(R987B)**

a. Implementation of a program for inspection and surveillance activities;

b. Ensuring that required QC inspections are incorporated into inspection/test/ maintenance procedures, design change documents, and work process control documents;

c. Ensuring that inspections and surveillances are correctly performed and documented;

d. Reviewing inspection procedures to determine the need for an independent inspection and the degree and method if such an inspection is required, and to ensure the identification of inspection personnel and the method of documentation of inspection results.

10.3.4 The Vice President Nuclear Engineering is responsible for: (R987B)

a. Implementation of a program for NDE;

b. ~~Ensuring that required NDEs are incorporated into inspection/test/maintenance procedures, design change documents, and work process control documents;~~ Specifying NDE holdpoint requirements;

c. Ensuring that NDE is correctly performed and documented;

~~d. Reviewing inspection procedures to determine the need for NDE and the degree and method if such an inspection is required, and to ensure the identification of NDE personnel and the method of documentation of NDE results.~~

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

10.1 GENERAL REQUIREMENTS

A program for inspection shall be established and executed by or for FPL to verify conformance with the documented instructions, procedures and drawings for accomplishing an activity. Inspections shall be performed by individuals or groups other than those who performed the activity being inspected. Examinations, measurements and tests of materials or products processed shall be performed for each work operation, where necessary, to assure conformance to established requirements. If direct inspection of processed materials or products is impossible or disadvantageous, indirect control by surveillance or monitoring shall be provided. Mandatory inspection, witness, or hold points beyond which work shall not proceed without the consent of FPL or a designated representative shall be indicated in the appropriate documents.

10.2 IMPLEMENTATION

10.2.1 Inspection Program

For plant operations, maintenance, or modification activities, a program for on-site inspection of activities affecting quality shall be established. This program shall ensure the performance of inspections, surveillance and monitoring of plant activities including operations, maintenance or modifications as required by established plans, schedules and/or procedurally required inspection, witness or hold points. In all cases, the personnel performing the inspection shall be independent of the group performing the work.

For preoperational start-up and testing of plant modifications, Nuclear Division personnel may report functionally to the manager responsible for the start-up and testing and establish plans, schedules and procedurally required inspection, witness or hold points. In all cases, the personnel performing the inspection shall be independent of the group performing the work.

~~Station Area~~ **Transmission** Operations personnel may perform inspections of equipment within their purview during operations. Inspections shall be performed in accordance with approved, written procedures by qualified personnel. **(R1022)**

Quality Instructions shall be written which delineate the requirements and responsibilities for the performance of inspections.

10.2.2 Inspection Plans and Schedules

Documented inspection plans may be either a separate document or an integral part of work instruction documents. The plans shall be based on design specifications, procurement documents, drawings, other specifications or previous experience, as appropriate. The frequency and timing of inspections shall be scheduled according to the activities being conducted and to assure that sufficient time and resources are available, and inspections are not inadvertently omitted or bypassed.

Inspection planning should include a review for the acceptability of sampling. If sampling is permitted, the sampling procedure shall be based on nationally recognized standard practices.

10.2.3 Inspection Personnel

Inspections shall be performed by individuals other than those who performed or directly supervised the activity being inspected. Inspection personnel shall have current qualifications and certifications in accordance with appropriate codes, standards and/or company training programs. These qualifications and certifications shall be documented.

Prior to performing inspections, inspection personnel shall have access to the drawings, procedures, specifications or other documented criteria necessary for performance of the inspection.

10.2.4 Inspection Procedures

Required inspection, surveillance or monitoring activities shall be performed and documented according to written, approved instructions or procedures.

a. Inspection procedures, instructions or checklists shall contain the following:

- o Identification of characteristics to be inspected;
- o Identification of the individual or groups responsible for performing the inspection;
- o Acceptance criteria or reference to the acceptance criteria;
- o A description of the method of inspection;
- o Verification of completion and certification of inspection.

b. Inspection records shall identify:

- o Inspector or data recorder;
- o Method or type of observations;
- o Test or inspection results;
- o Statement of acceptability;
- o Date of observation;
- o Deficiencies and nonconformances, and the action taken in connection with these deficient conditions, either by inclusion or by reference to other documents;

c. Inspection procedures shall be reviewed by Nuclear Assurance personnel or for NDE by Engineering personnel to determine the need for an independent inspection and the degree and method if such an inspection is required, and to assure the identification of inspection personnel and the method of documentation of inspection results;

d. Written approved instructions shall specify surveillance or monitoring of processing methods, or testing and operation of equipment when inspection is impossible, inaccessible or not applicable;

e. Modification, repair, replacement or rework items shall be inspected in accordance with original inspection requirements or acceptable alternatives.

10.2.5 Inspection, Witness, and Hold Point Identification

Appropriate inspection, witness or hold points shall appear in process documents (e.g., construction, testing, operating and maintenance procedures). These process procedures are subject to the review of the Quality Control organization for adequacy of inspection, witness, and hold points.

Mandatory hold points shall be identified in process documents when witnessing and inspecting must be performed and signed-off by the responsible personnel before work can proceed.

FPL procurement documents shall indicate FPL witness or hold points applicable prior to during, or after the manufacture of an item or the performance of a service. A distinction shall be made between witness points and mandatory hold points.

10.3 RESPONSIBILITIES

10.3.1 Direct Reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division that perform inspection activities are responsible for:

a. Implementation of a program for inspection activities;

b. Ensuring that this program verifies compliance with applicable portions of Technical Specifications, SAR requirements, procurement documents, other operating license requirements and the QA Manual;

c. Ensuring that personnel assigned to perform inspections are appropriately qualified and certified.

10.3.2 Direct Reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division that plan or execute work activities are responsible for:

a. Ensuring that inspections are not inadvertently omitted or bypassed;

b. Incorporating NDE inspection and holdpoints into procedures and work documents as specified by Engineering;

c. Ensuring coordination with QC for incorporation of QC inspection and hold points into procedures and work documents;

d. Ensuring inspection procedures are reviewed by Nuclear Assurance personnel or for NDE by Engineering personnel to determine the need for an independent inspection and the degree and method if such an inspection is required, and to ensure the identification of inspection personnel and the method of documentation of inspection results.

10.3.3 The Director Nuclear Assurance is responsible for:

a. Implementation of a program for inspection and surveillance activities;

b. Ensuring that required QC inspections are incorporated into inspection/test/ maintenance procedures, design change documents, and work process control documents;

c. Ensuring that inspections and surveillances are correctly performed and documented;

d. Reviewing inspection procedures to determine the need for an independent inspection and the degree and method if such an inspection is required, and to ensure the identification of inspection personnel and the method of documentation of inspection results.

10.3.4 The Vice President Nuclear Engineering is responsible for:

a. Implementation of a program for NDE;

b. Specifying NDE holdpoint requirements;

c. Ensuring that NDE is correctly performed and documented;

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

11.1 GENERAL REQUIREMENTS

A test program shall be established to assure that testing required to demonstrate that structures, systems and components will perform satisfactorily in service is identified, accomplished, and documented in accordance with written procedures. The test program shall include, as appropriate, proof tests prior to installation, pre-operational tests, start-up tests, operational tests, and retest following repairs, replacements or modifications.

11.2 IMPLEMENTATION

11.2.1 Test Program

Testing requirements shall be identified in the engineering/design documents, SAR documents, procedures, or procurement documents, as appropriate. Retest following repairs, replacements, or modifications shall be performed in accordance with the original design and test requirements or acceptable alternatives. Retest shall be performed when the original test results are invalidated. A schedule shall be provided and maintained to provide assurance that all tests are performed and properly evaluated on a timely basis.

Quality Instructions shall be written which delineate the methods and responsibilities for scheduling, controlling, accomplishing, and documenting testing.

FPL may delegate the implementation of all or any part of the test program to other organizations but shall retain ultimate responsibility for the program. The contractor shall be required to control, perform and evaluate tests in accordance with written procedures and shall be required to prepare a written test program detailing the testing required.

11.2.2 Test Procedure Preparation and Test Performance

Testing shall be accomplished in accordance with written approved test procedures which incorporate or reference the requirements and acceptance limits in the applicable design and procurement documents. Test procedures shall be revised as necessary to assure that tests are performed in accordance with the latest approved information. The test procedure or test program documents shall include or reference the following as a minimum:

a. Instructions for the testing method used (including precautions, limitations, and restoration of normal conditions upon test completion);

b. Required test equipment and instrumentation;

c. Test requirements and acceptance criteria;

d. Hold, witness, inspection and data collection points;

e. Test prerequisites such as: calibrated instrumentation; trained, qualified, and licensed or certified personnel; preparation, condition and completeness of item to be tested; suitable and controlled environmental conditions; defined system interfaces; initial plant conditions;

f. Methods for documenting or recording test data and results;

g. Test records shall identify:

1) Identification of personnel performing the testing activities;
2) Method or type of observations;
3) Test or inspection results (to include pertinent test data);
4) Specific measuring and test equipment utilized for testing;
5) As found and as left condition (as applicable);
6) Statement of acceptability;
7) Date of observation; and
8) Deficiencies and nonconformances, and the action taken in connection with these deficient conditions, either by inclusion or by reference to other documents.

11.2.3 Evaluation of Test Results

The documented test results shall be evaluated against the predetermined acceptance criteria by a group or individual having appropriate qualifications. The acceptance status of the test shall be documented. Deficiencies noted during the evaluation shall be documented and disposition provided in accordance with TQR 15.0 and approved Quality Instructions.

The evaluation of the test results may be delegated to other organizations; however, FPL shall retain the responsibility for the evaluation. The evaluating organization shall be required to use qualified personnel, evaluate the data against predetermined criteria, and document the results of the evaluation and acceptance status of the test.

11.3 RESPONSIBILITIES

11.3.1 The Site Vice President is responsible for:

a. Assuring that plant tests are identified, scheduled, controlled, performed and documented;
b. Assuring that plant test procedures are reviewed and approved.

11.3.2 The Director Nuclear Assurance is responsible for:

a. Assuring that test procedures specify necessary quality requirements such as witness and hold points, and adequate data sheets.

11.3.3 The Director ~~Protection & Control Systems~~ **Station Area Operations** is responsible for: **(R998)**

a. Assuring the identification, scheduling, control, performance, and documentation of tests performed by **the on-site** Protection & Control ~~Systems~~ **section of Station Area Operations**;

b. Submitting test procedures to the Plant General Manager for review;

c. Coordinating test schedules with the Plant General Manager.

11.3.4 The Vice President Nuclear Engineering is responsible for:

a. Specifying the need for pre-installation and post-installation testing of items within the purview of Nuclear Engineering;

b. Writing test procedures as requested;

c. Evaluating test results as requested.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

11.1 GENERAL REQUIREMENTS

A test program shall be established to assure that testing required to demonstrate that structures, systems and components will perform satisfactorily in service is identified, accomplished, and documented in accordance with written procedures. The test program shall include, as appropriate, proof tests prior to installation, pre-operational tests, start-up tests, operational tests, and retest following repairs, replacements or modifications.

11.2 IMPLEMENTATION

11.2.1 Test Program

Testing requirements shall be identified in the engineering/design documents, SAR documents, procedures, or procurement documents, as appropriate. Retest following repairs, replacements, or modifications shall be performed in accordance with the original design and test requirements or acceptable alternatives. Retest shall be performed when the original test results are invalidated. A schedule shall be provided and maintained to provide assurance that all tests are performed and properly evaluated on a timely basis.

Quality Instructions shall be written which delineate the methods and responsibilities for scheduling, controlling, accomplishing, and documenting testing.

FPL may delegate the implementation of all or any part of the test program to other organizations but shall retain ultimate responsibility for the program. The contractor shall be required to control, perform and evaluate tests in accordance with written procedures and shall be required to prepare a written test program detailing the testing required.

11.2.2 Test Procedure Preparation and Test Performance

Testing shall be accomplished in accordance with written approved test procedures which incorporate or reference the requirements and acceptance limits in the applicable design and procurement documents. Test procedures shall be revised as necessary to assure that tests are performed in accordance with the latest approved information. The test procedure or test program documents shall include or reference the following as a minimum:

a. Instructions for the testing method used (including precautions, limitations, and restoration of normal conditions upon test completion);

b. Required test equipment and instrumentation;

c. Test requirements and acceptance criteria;

d. Hold, witness, inspection and data collection points;

e. Test prerequisites such as: calibrated instrumentation; trained, qualified, and licensed or certified personnel; preparation, condition and completeness of item to be tested; suitable and controlled environmental conditions; defined system interfaces; initial plant conditions;

f. Methods for documenting or recording test data and results;

g. Test records shall identify:

1) Identification of personnel performing the testing activities;
2) Method or type of observations;
3) Test or inspection results (to include pertinent test data);
4) Specific measuring and test equipment utilized for testing;
5) As found and as left condition (as applicable);
6) Statement of acceptability;
7) Date of observation; and
8) Deficiencies and nonconformances, and the action taken in connection with these deficient conditions, either by inclusion or by reference to other documents.

11.2.3 Evaluation of Test Results

The documented test results shall be evaluated against the predetermined acceptance criteria by a group or individual having appropriate qualifications. The acceptance status of the test shall be documented. Deficiencies noted during the evaluation shall be documented and disposition provided in accordance with TQR 15.0 and approved Quality Instructions.

The evaluation of the test results may be delegated to other organizations; however, FPL shall retain the responsibility for the evaluation. The evaluating organization shall be required to use qualified personnel, evaluate the data against predetermined criteria, and document the results of the evaluation and acceptance status of the test.

11.3 RESPONSIBILITIES

11.3.1 The Site Vice President is responsible for:

a. Assuring that plant tests are identified, scheduled, controlled, performed and documented;

b. Assuring that plant test procedures are reviewed and approved.

11.3.2 The Director Nuclear Assurance is responsible for:

a. Assuring that test procedures specify necessary quality requirements such as witness and hold points, and adequate data sheets.

11.3.3 The Director ~~Station Area~~ **Transmission** Operations is responsible for: **(R1023)**

a. Assuring the identification, scheduling, control, performance, and documentation of tests performed by the on-site Protection & Control section of ~~Station Area~~ **Transmission** Operations;

b. Submitting test procedures to the Plant General Manager for review;

c. Coordinating test schedules with the Plant General Manager.

11.3.4 The Vice President Nuclear Engineering is responsible for:

a. Specifying the need for pre-installation and post-installation testing of items within the purview of Nuclear Engineering;

b. Writing test procedures as requested;

c. Evaluating test results as requested.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

12.1 GENERAL REQUIREMENTS

Measures shall be established to assure that tools, gages, instruments, and other measuring and testing devices used in activities affecting quality are properly controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits. It is the responsibility of each department maintaining calibrated instruments to provide for the calibration and control of such instruments.

12.2 IMPLEMENTATION

12.2.1 Calibration and Control of Measuring and Test Equipment

Procedures shall be written to delineate the methods and responsibilities for the control, maintenance, and calibration of measuring and test equipment (M&TE) and installed plant instrumentation and control equipment. M&TE control procedures or calibration program documents shall contain the following:

a. A complete listing of M&TE and installed plant instrumentation and control equipment to be controlled;

b. The frequency of calibration of listed M&TE and installed plant instrumentation and control equipment. The frequency may be based on calendar time or relate to usage and shall be based on such factors as licensing commitments, regulatory requirements, experience, inherent stability, manufacturer's recommendations, purpose of use, frequency of service, or company standards. A schedule for calibration shall be established and shall indicate as a minimum the instrument, calibration frequency, and procedure to be used or the identification of the approved supplier qualified to provide calibration services;

c. A method for controlling issue and recall of portable M&TE;

d. A method to uniquely identify controlled M&TE (e.g., labeling), required calibration frequency and calibration test data applicable to the M&TE and installed plant instrumentation and control equipment;

e. A method to document and maintain the status of M&TE and installed plant instrumentation and control equipment.

M&TE shall be calibrated in environments which will not adversely affect their accuracy. When inaccuracy due to environmental effects cannot be avoided, compensating corrections shall be determined and applied in accordance with the manufacturer technical instructions.

M&TE and reference standards shall be suitably marked so that the calibration status can

be determined.

FPL may delegate the control and/or calibration of M&TE to other organizations. FPL, however, retains ultimate responsibility for control and calibration, and the contractor shall meet the requirements of this TQR or an acceptable alternative program as required by the procurement document for the contracted services.

12.2.2 Calibration Procedure

M&TE, reference standards, and listed installed plant instrumentation and control equipment shall be calibrated in accordance with written approved procedures. Calibration procedures shall contain, or reference as a minimum:

a. Identity of M&TE or equipment to which the procedure applies;

b. Calibration equipment and reference standards to be used;

c. Acceptance criteria;

d. Sequence of operations;

e. Special instructions (such as, prerequisites, power level requirements, precautions, limitations) as applicable;

f. Documentation and data collection requirements;

g. A requirement that equipment to be calibrated, be checked and results recorded before adjustments or repairs are made;

h. Calibration frequency required.

12.2.3 Calibration Standards

M&TE shall be calibrated using reference standards whose calibration has a known, documented, valid relationship to nationally recognized standards or accepted values of natural physical constants. If no national standard exists, the basis for calibration shall be documented. Standards and reference standards shall have an accuracy level, range and stability which are adequate to verify that the equipment being calibrated is within tolerance and adequate for the programmatic requirements of the equipment being calibrated.

M&TE shall be calibrated against working standards having an accuracy of at least four times the required accuracy of the equipment being calibrated. When this is not practical, working standards shall have an accuracy that assures that the M&TE being calibrated will be within required accuracy tolerances and that the basis of acceptance is documented and authorized by designated responsible management.

The meaning of this paragraph may be diagrammed as follows:

___ NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)
"greater than" tolerance


PRIMARY STANDARD (if applicable)
"greater than" tolerance


SECONDARY STANDARD (if applicable)
"greater than" tolerance


WORKING STANDARD
"1:4 ratio" tolerance (except as noted above)


M&TE (installed instruments and measuring and test equipment used for inspection, maintenance, etc.)

The accuracies of M&TE and reference standards shall be chosen such that the equipment being calibrated can be calibrated and maintained within the required tolerances.

12.2.4 "Out of Tolerance" Control and Corrective Action

The reporting, follow-up, and correction of conditions adverse to quality found during calibration or calibration checks shall be documented. M&TE and reference standards, when found out of tolerance, shall be so identified and removed from service, tagged to indicate its status and segregated from M&TE in service, pending disposition of corrective action. A documented investigation shall be conducted to determine the validity of previous inspection or test results gained through use of the instrument, and of the acceptability of items previously inspected or tested.

12.3 RESPONSIBILITIES

12.3.1 Direct reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division shall be responsibile for:

a. Assuring that the affected plant departments establish and maintain a calibration control program;
b. Assuring that written procedures governing calibration activities are reviewed and approved prior to use;
c. Assuring that documentation of calibration activities are reviewed and approved.

12.3.2 The Director ~~Protection & Control Systems~~ **Station Area Operations** is responsible for assuring that calibration control procedures for installed plant instrumentation and control equipment under his control are submitted to the Plant General Manager for review, and for coordination of calibration activity schedules with plant supervisors. **(R1000)**

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

12.1 GENERAL REQUIREMENTS

Measures shall be established to assure that tools, gages, instruments, and other measuring and testing devices used in activities affecting quality are properly controlled, calibrated, and adjusted at specified periods to maintain accuracy within necessary limits. It is the responsibility of each department maintaining calibrated instruments to provide for the calibration and control of such instruments.

12.2 IMPLEMENTATION

12.2.1 Calibration and Control of Measuring and Test Equipment

Procedures shall be written to delineate the methods and responsibilities for the control, maintenance, and calibration of measuring and test equipment (M&TE) and installed plant instrumentation and control equipment. M&TE control procedures or calibration program documents shall contain the following:

a. A complete listing of M&TE and installed plant instrumentation and control equipment to be controlled;

b. The frequency of calibration of listed M&TE and installed plant instrumentation and control equipment. The frequency may be based on calendar time or relate to usage and shall be based on such factors as licensing commitments, regulatory requirements, experience, inherent stability, manufacturer's recommendations, purpose of use, frequency of service, or company standards. A schedule for calibration shall be established and shall indicate as a minimum the instrument, calibration frequency, and procedure to be used or the identification of the approved supplier qualified to provide calibration services;

c. A method for controlling issue and recall of portable M&TE;

d. A method to uniquely identify controlled M&TE (e.g., labeling), required calibration frequency and calibration test data applicable to the M&TE and installed plant instrumentation and control equipment;

e. A method to document and maintain the status of M&TE and installed plant instrumentation and control equipment.

M&TE shall be calibrated in environments which will not adversely affect their accuracy. When inaccuracy due to environmental effects cannot be avoided, compensating corrections shall be determined and applied in accordance with the manufacturer technical instructions.

M&TE and reference standards shall be suitably marked so that the calibration status can

be determined.

FPL may delegate the control and/or calibration of M&TE to other organizations. FPL, however, retains ultimate responsibility for control and calibration, and the contractor shall meet the requirements of this TQR or an acceptable alternative program as required by the procurement document for the contracted services.

12.2.2 Calibration Procedure

M&TE, reference standards, and listed installed plant instrumentation and control equipment shall be calibrated in accordance with written approved procedures. Calibration procedures shall contain, or reference as a minimum:

a. Identity of M&TE or equipment to which the procedure applies;

b. Calibration equipment and reference standards to be used;

c. Acceptance criteria;

d. Sequence of operations;

e. Special instructions (such as, prerequisites, power level requirements, precautions, limitations) as applicable;

f. Documentation and data collection requirements;

g. A requirement that equipment to be calibrated, be checked and results recorded before adjustments or repairs are made;

h. Calibration frequency required.

12.2.3 Calibration Standards

M&TE shall be calibrated using reference standards whose calibration has a known, documented, valid relationship to nationally recognized standards or accepted values of natural physical constants. If no national standard exists, the basis for calibration shall be documented. Standards and reference standards shall have an accuracy level, range and stability which are adequate to verify that the equipment being calibrated is within tolerance and adequate for the programmatic requirements of the equipment being calibrated.

M&TE shall be calibrated against working standards having an accuracy of at least four times the required accuracy of the equipment being calibrated. When this is not practical, working standards shall have an accuracy that assures that the M&TE being calibrated will be within required accuracy tolerances and that the basis of acceptance is documented and authorized by designated responsible management.

The meaning of this paragraph may be diagrammed as follows:

___ NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST)
"greater than" tolerance


PRIMARY STANDARD (if applicable)
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"greater than" tolerance


WORKING STANDARD
"1:4 ratio" tolerance (except as noted above)


M&TE (installed instruments and measuring and test equipment used for inspection, maintenance, etc.)

The accuracies of M&TE and reference standards shall be chosen such that the equipment being calibrated can be calibrated and maintained within the required tolerances.

12.2.4 "Out of Tolerance" Control and Corrective Action

The reporting, follow-up, and correction of conditions adverse to quality found during calibration or calibration checks shall be documented. M&TE and reference standards, when found out of tolerance, shall be so identified and removed from service, tagged to indicate its status and segregated from M&TE in service, pending disposition of corrective action. A documented investigation shall be conducted to determine the validity of previous inspection or test results gained through use of the instrument, and of the acceptability of items previously inspected or tested.

12.3 RESPONSIBILITIES

12.3.1 Direct reports of the President, Nuclear Division, and Department Heads of organizations supporting the Nuclear Division shall be responsibile for:

a. Assuring that the affected plant departments establish and maintain a calibration control program;
b. Assuring that written procedures governing calibration activities are reviewed and approved prior to use;
c. Assuring that documentation of calibration activities are reviewed and approved.

12.3.2 The Director ~~Station Area~~ **Transmission** Operations is responsible for assuring that calibration control procedures for installed plant instrumentation and control equipment under ~~his~~ **Transmission Operations** control are submitted to the Plant General Manager for review, and for coordination of calibration activity schedules with plant supervisors. **(R1024)**

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

13.1 GENERAL REQUIREMENTS

Written instructions or procedures shall be established and implemented for the cleaning, shipping, storage, preservation, packaging, and handling of specified items. These instructions and procedures shall delineate measures which prevent degrading an item through damage or deterioration. When necessary for particular products, special protective environments such as inert gas atmosphere, specific moisture content levels, and temperature levels shall be specified and provided.

Housekeeping procedures and instructions shall require cleanness to be maintained at a level consistent with the work performed to prevent the entry of foreign material into safety related systems. Control of personnel, tools, equipment and supplies shall be established with approved procedures or instructions when the safety function of a system, component or item may be jeopardized and also while the reactor system is opened for inspection, maintenance or repair. Documented cleanness inspections shall be performed prior to system closure.

13.2 IMPLEMENTATION

13.2.1 General

Instructions or procedures shall be written to define the requirements and responsibilities for the housekeeping, cleaning, packaging, preservation, handling, storage, and shipping of equipment and material, and shall require implementation of the established design and specification requirements by personnel having appropriate qualifications. FPL may delegate any portion of the responsibility for cleaning, housekeeping, handling, storage and shipping of material and equipment, but shall retain ultimate responsibility. Where any of the functions in the sections which follow is delegated to a contractor, the contractor shall be required to adhere to the FPL requirements stated herein.

13.2.2 Handling, Storage, and Shipping Procedures

Materials and equipment which are to be incorporated into a safety related system of a nuclear power plant shall be handled, stored, and shipped in accordance with written procedures, where necessary, to implement the design document and purchase order requirements. These procedures shall assure that cleaning, handling, storing, packaging, shipping, and preserving materials, components and systems will preclude damage, loss, or deterioration by environmental conditions, such as temperature or humidity.

Site specific procedures or specific work instructions shall be developed which provide guidelines in handling heavy loads that are lifted over, or in proximity to, irradiated fuel or safe shutdown equipment/systems.

The preparation and/or implementation of these procedures may be delegated to other organizations, but FPL shall retain the ultimate responsibility for proper material handling, storage, and shipping.

13.2.3 Cleanness Procedures

Procedures or work instructions for cleaning; cleanness control practices and inspections; examinations or tests to verify cleanness of items; shall be prepared and implemented.

13.2.4 Housekeeping Procedures

Methods and techniques for controlling and maintaining housekeeping and documenting housekeeping surveillances and inspections shall be delineated in procedures or instructions.

13.3 RESPONSIBILITIES

13.3.1 The Site Vice President has overall responsibility for ensuring that handling, storage, shipping, cleanness and housekeeping requirements are identified, and implemented **within the plant. (R995)**

13.3.2 The Vice President Nuclear Engineering is responsible for:

a. Identifying special handling and storage requirements for site-fabricated items in applicable design output documents/work instructions;

b. Identifying cleaning and cleanness verification methods in appropriate specifications, drawings or procedures.

13.3.3 The Director Nuclear Assurance is responsible for:

a. Verifying proper handling, storage, and shipping activities at supplier facilities;

b. Verification of housekeeping, handling, storage, shipping and cleanness of items through inspections, surveillances, examinations or tests at the plant site **and warehousing facilities. (R995)**

13.3.4 The Manager Nuclear Procurement & Logistics has overall responsibility for ensuring that handling, storage, shipping, cleanness, and housekeeping requirements are identified and implemented within warehousing facilities. (R995)

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

13.1 GENERAL REQUIREMENTS

Written instructions or procedures shall be established and implemented for the cleaning, shipping, storage, preservation, packaging, and handling of specified items. These instructions and procedures shall delineate measures which prevent degrading an item through damage or deterioration. When necessary for particular products, special protective environments such as inert gas atmosphere, specific moisture content levels, and temperature levels shall be specified and provided.

Housekeeping procedures and instructions shall require cleanness to be maintained at a level consistent with the work performed to prevent the entry of foreign material into safety related systems. Control of personnel, tools, equipment and supplies shall be established with approved procedures or instructions when the safety function of a system, component or item may be jeopardized and also while the reactor system is opened for inspection, maintenance or repair. Documented cleanness inspections shall be performed prior to system closure.

13.2 IMPLEMENTATION

13.2.1 General

Instructions or procedures shall be written to define the requirements and responsibilities for the housekeeping, cleaning, packaging, preservation, handling, storage, and shipping of equipment and material, and shall require implementation of the established design and specification requirements by personnel having appropriate qualifications. FPL may delegate any portion of the responsibility for cleaning, housekeeping, handling, storage and shipping of material and equipment, but shall retain ultimate responsibility. Where any of the functions in the sections which follow is delegated to a contractor, the contractor shall be required to adhere to the FPL requirements stated herein.

13.2.2 Handling, Storage, and Shipping Procedures

Materials and equipment which are to be incorporated into a safety related system of a nuclear power plant shall be handled, stored, and shipped in accordance with written procedures, where necessary, to implement the design document and purchase order requirements. These procedures shall assure that cleaning, handling, storing, packaging, shipping, and preserving materials, components and systems will preclude damage, loss, or deterioration by environmental conditions, such as temperature or humidity.

Site specific procedures or specific work instructions shall be developed which provide guidelines in handling heavy loads that are lifted over, or in proximity to, irradiated fuel or safe shutdown equipment/systems.

The preparation and/or implementation of these procedures may be delegated to other organizations, but FPL shall retain the ultimate responsibility for proper material handling, storage, and shipping.

13.2.3 Cleanness Procedures

Procedures or work instructions for cleaning; cleanness control practices and inspections; examinations or tests to verify cleanness of items; shall be prepared and implemented.

13.2.4 Housekeeping Procedures

Methods and techniques for controlling and maintaining housekeeping and documenting housekeeping surveillances and inspections shall be delineated in procedures or instructions.

13.3 RESPONSIBILITIES

13.3.1 The Site Vice President has overall responsibility for ensuring that handling, storage, shipping, cleanness and housekeeping requirements are identified, and implemented within the plant.

13.3.2 The Vice President Nuclear Engineering is responsible for:

a. Identifying special handling and storage requirements for site-fabricated items in applicable design output documents/work instructions;

b. Identifying cleaning and cleanness verification methods in appropriate specifications, drawings or procedures.

13.3.3 The Director Nuclear Assurance is responsible for:

a. Verifying proper handling, storage, and shipping activities at supplier facilities;

b. Verification of housekeeping, handling, storage, shipping and cleanness of items through inspections, surveillances, examinations or tests at the plant site and warehousing facilities.

13.3.4 The ~~Manager Nuclear Procurement & Logistics~~ **Director Nuclear & Power Generation Materials Operation** has overall responsibility for ensuring that handling, storage, shipping, cleanness, and housekeeping requirements are identified and implemented within warehousing facilities. **(R1013)**

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

16.1 GENERAL REQUIREMENTS

Documented measures shall be used to assure that conditions adverse to quality such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances, are promptly identified and corrected as soon as practicable. In the case of significant conditions adverse to quality, the cause of the condition shall be determined and action taken to preclude repetition. The identification of significant conditions adverse to quality, the cause of the condition, and the corrective action taken shall be documented and reported to appropriate levels of management.

16.2 IMPLEMENTATION

16.2.1 Corrective Action and Follow-Up

Quality Instructions shall define responsibilities and methods for identifying and correcting conditions adverse to quality. When an adverse condition is detected, a determination shall be made by plant supervision, Nuclear Assurance personnel, or for Juno Beach Condition Reports, the Vice President, Nuclear Engineering or his designee as to whether immediate or routine corrective action is required.

a. "Immediate Corrective Action" applies to conditions which pose a threat to plant safety or to the health and safety of the public, which could result in major equipment and material damage, or could, if not corrected, produce defects of significantly greater consequences than those immediately resulting from the condition. "Immediate Corrective Action" is accomplished through stop-work requests/orders to appropriate levels of management, requiring that work be stopped, the plant be shut down or other appropriate actions be taken.

   Specific personnel having stop work authority include the Plant General Manager, Site Quality Manager and Plant Vice President.

b. "Routine Corrective Action" applies to conditions which do not require immediate corrective action. Routine corrective action is assured through the distribution and disposition associated with inspection reports, surveillance reports, condition reports, nonconformance reports, and audit reports; and the investigation analysis and action associated with reportable events.

Interdepartmental corrective action shall be requested by use of written correspondence. Audit reports, condition reports, nonconformance reports, interoffice letters, and other documents may be used for this purpose.

Follow-up to verify implementation of corrective action and close-out of corrective action documentation is accomplished by the organization responsible for verifying the corrective action. The Nuclear Assurance Department shall track, follow-up, and closeout open items identified as findings. The respective department or plant shall track those items charged to its operating license by the NRC. Each department shall be responsible for initiating condition reports or other formal corrective action documents to assure follow-up and close-out of corrective action resulting from their departmental inspections, tests, or operations.

If corrective action is inadequate or not timely, the follow-up organization shall request corrective action from management, as delineated in procedures. The President Nuclear Division is the final authority in the event that agreement is not reached at lower levels regarding stop work requests or other corrective action.

Where corrective action is required of contractor personnel, FPL shall define in procedures and contracts the corrective action interface between FPL and the contractor. FPL shall require the A/E, NSSS vendor, constructor and other suppliers of safety related materials and services to have a documented corrective action system.

16.2.2 Recurrence Control

For significant condition adverse to quality, the organization or individual responsible for evaluating corrective action shall verify that the corrective action description not only corrects the immediate condition, but also precludes the condition from recurring. The organization(s) that provide(s) the corrective action disposition and implementation is responsible to assure that the corrective action taken not only corrects the immediate condition, but also precludes recurrence.

16.2.3 Incidents and Reportable Events Reporting

Operating reportable events and reports of incidents shall be investigated, documented as to cause and corrective action, and reported to the NRC in accordance with the ~~applicable plant Technical Specifications~~ **St. Lucie Technical Specifications, Turkey Point UFSAR,** and Federal Regulations. Reportable events and reports of incidents that are safety related or that result in damage shall be forwarded to the Company Nuclear Review Board (CNRB) for review. Conditions adverse to quality are reported to operating plant management through: distribution of QA audit reports, QC inspection reports, corrective action requests, and the investigation and reporting of reportable events in accordance with ~~plant Technical Specifications~~ **the St. Lucie Technical Specifications or the Turkey Point UFSAR. (R1018)**

16.3 RESPONSIBILITIES

16.3.1 The President Nuclear Division is the final authority in the event agreement relating to stop work requests or other proposed corrective action is not reached at lower management levels.

16.3.2 Direct reports of the President Nuclear Division and Department Heads of organizations supporting the Nuclear Division are responsible for:

a. Assuring that timely corrective action within their respective organization;

b. Initiating condition reports or other formal corrective action document to assure follow-up and completion of corrective action resulting from their respective department's audits, inspections, surveillances, tests, or operations;

c. Reviewing and investigating audit findings to determine and schedule appropriate corrective action and responding as requested in the audit report.

16.3.3 The Director Nuclear Assurance has the responsibility and authority to recommend that work be stopped or appropriate corrective action taken as a result of QA findings during department audits and reviews or QC activities.

16.3.4 All personnel detecting conditions adverse to quality or significant conditions adverse to quality are responsible for reporting such conditions to the appropriate authority.

16.3.5 The Vice Presidents, PSL, PTN, Nuclear Engineering, and the Director of Nuclear Assurance are responsible for administering a commitment tracking system.

Verification of Printed Hardcopy to Controlled Document is Required Prior to Use

18.1 GENERAL REQUIREMENTS

A comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program. The audits shall be performed in accordance with the written procedures or checklists by appropriately trained personnel not having direct responsibilities in the areas being audited. Audit results shall be documented and reviewed by management having responsibility in the area audited. Follow-up action, including reaudit of deficient areas, shall be taken, where necessary.

18.2 IMPLEMENTATION

A comprehensive program of audits is carried out by the Quality Assurance Department during the design, procurement, construction, and operations phase of nuclear power plants. These audits are performed to verify that all safety related activities associated with nuclear power plants are carried out in accordance with the requirements of the FPL QA Program, and that the implementation is effective.

18.2.1 Personnel

Quality Instructions shall provide instructions for the training of QA Department personnel who perform audit activities, to assure that they are adequately indoctrinated and trained, and that they are qualified to carry out these activities. Quality Instructions provide for personnel qualified as Lead Auditors to be formally certified by Quality Assurance Department management. Certification shall be based on education, experience, training and other specified criteria.

18.2.2 Planning and Scheduling

Quality Instructions provide requirements for written audit plans and schedules. The audits are planned and scheduled on the basis of the following:

a. Activities shall be audited as early in their life as practicable. Auditing shall be initiated early enough to assure effective quality assurance during the design, procurement and contracting activities;

b. The system of audits devised to verify compliance with aspects of the nuclear plants is described in ~~each unit's technical specifications~~ **St. Lucie's Technical Specifications or Turkey Point's UFSAR**. Audits of selected aspects of operational phase activities are performed with a frequency commensurate with safety significance. As a minimun, unless otherwise specified by ~~technical specifications~~ **St. Lucie's Technical Specifications or Turkey Point's UFSAR**, the Code of Federal Regulations or other licensing commitments, these audits are performed at a biennial (2-year) frequency. The audit system is reviewed periodically and revised as necessary to assure coverage commensurate with current and planned activities; **(R1019)**

c. An annual evaluation of suppliers' quality performance history shall be performed to determine reaudit requirements. Reaudit requirements for suppliers shall be based on the supplier's quality performance and the complexity and criticality of the equipment or service being procured. A facility evaluation (audit) will be performed at least every three years and shall be conducted in accordance with Quality Instructions for supplier evaluations;

d. Audits shall be regularly scheduled for on-going activities;

e. Regularly scheduled audits shall be supplemented, as required to cover unforeseen events or changes in requirements.

The scope of audit activities shall include, as a minimum:

a. The determination of site features which affect plant safety (e.g., core sampling, site preparation, and meteorology);

b. The preparation, review, approval, and control of the SAR, designs, specifications, procurement documents, instructions, procedures, and drawings;

c. Evaluation of bids;
d. Indoctrination and training programs;
e. Receiving and plant inspections;
f. Operation, maintenance/repair and modification;
g. The implementation of operating and test procedures;
h. All criteria in Appendix B to 10 CFR Part 50;
i. Validity of Certificates of Conformance.

External audits shall be performed by the Quality Assurance Department on Architect/Engineers, NSSS vendors, constructors, and other suppliers of safety related materials and services to evaluate their QA programs, procedures and activities. Procurement documents shall require that FPL suppliers and contractors in turn perform audits on their sub-tier suppliers and contractors.

18.2.3 Conduct of Audits

Quality Instructions shall delineate requirements for the conduct of audits. These instructions shall require that:

a. Audits be conducted by trained and qualified personnel;

b. Personnel conducting audits shall not have direct responsibility in the area audited;

c. Checklists or instructions shall be used to ensure depth and continuity of audits;

d. Objective evidence shall be examined for compliance with quality assurance program requirements. This shall include examination of instructions and activities to assure that documented objective evidence is meaningful and in compliance with the overall Quality Assurance Program;

e. Audits shall include evaluation of work areas, activities, processes and items; and the review of documents and records.

18.2.4 Reporting of Audit Findings

Audit findings shall be documented in written reports. Audit reports shall be distributed to the responsible management of the audited FPL organization within thirty calendar days after completion of the audit.

18.2.5 Follow-up

Responsible management of the audited organization shall take action to correct the deficiencies identified in the audit report and provide a written response within thirty calendar days after receipt of the report. This response shall include action taken and/or planned to correct deficiencies and to prevent recurrence of the deficiencies, and commitment dates for actions not yet complete. The mechanism for evaluation and follow-up of corrective action is described in TQR 16.0. The status of correction of deficiencies shall be followed until the corrective actions have been accomplished and verified.

18.2.6 Reports to Management

The Quality Assurance Department periodically reports on the status of the Quality Program to the members of the Company Nuclear Review Board (CNRB). This status report summarizes the results of QA Department audit activities for the period, keeps all CNRB members apprised of current conditions and program effectiveness, and when necessary, directs management attention to significant trends and problems.

18.3 RESPONSIBILITIES

18.3.1 Direct reports to the President, Nuclear Division, and Department Heads of organizations supporting the nuclear division shall be responsible for:

1. Taking action to correct deficiencies identified in audit reports;
2. Providing a written response within thirty (30) calendar days of receipt the audit report.

18.3.2 The Director Nuclear Assurance is responsible for the following:

a. Scheduling audits on a regular basis;

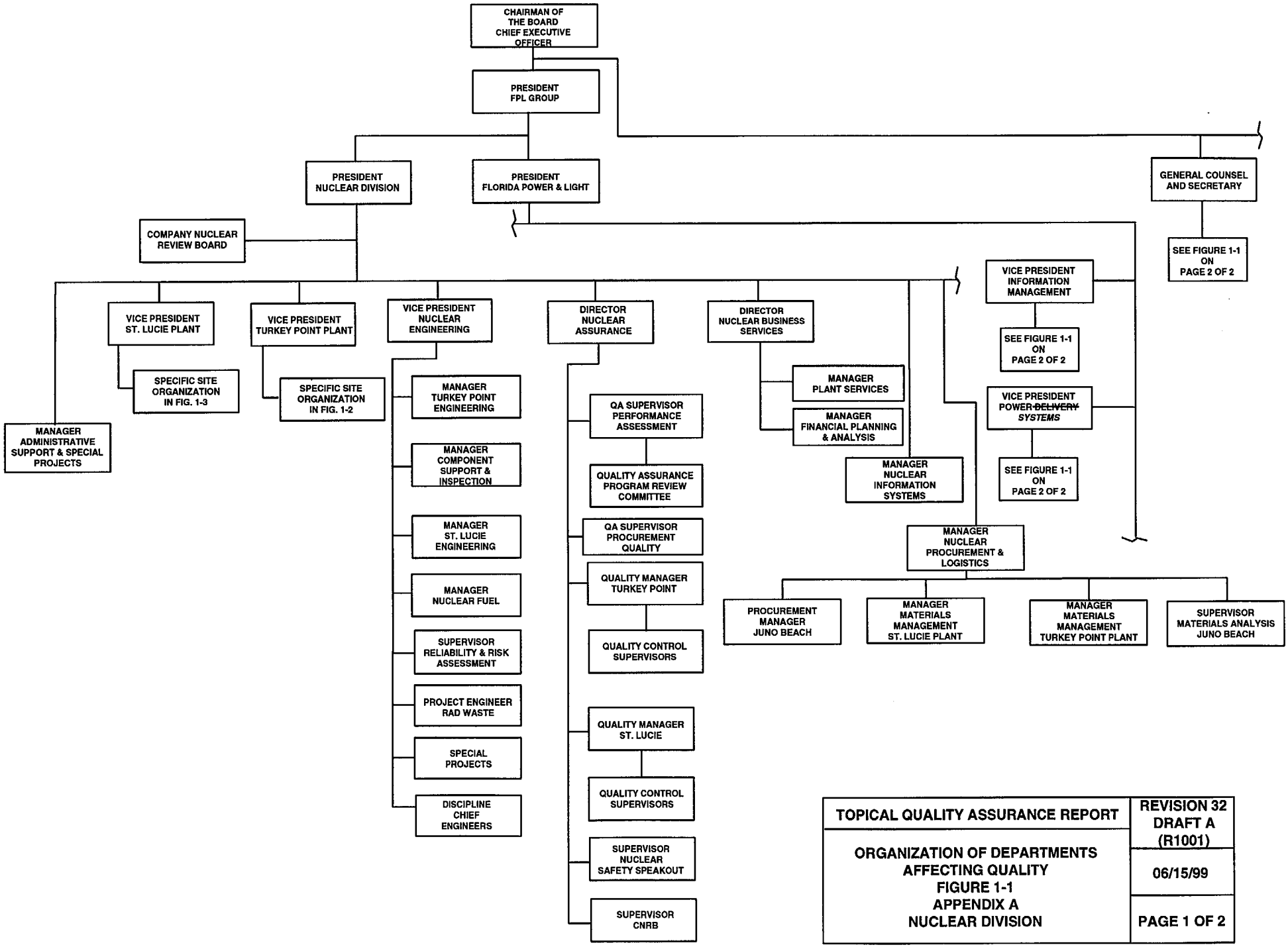
b. Selecting the audit team and the Lead Auditor;

c. Reviewing each audit report for accuracy, completeness, proper format and distribution;

d. Designating a qualified replacement Lead Auditor (in writing) if the audit team leader transfers from the respective QA group or is otherwise unable to continue the assigned audit;

e. The qualification of Lead Auditors.

18.3.3 The Chairman, Company Nuclear Review Board (CNRB) is responsible for review and concurrence of Annual Audit Program Plans, review of individual audit scopes and involvement in the audit program for internal audits as defined by CNRB instructions.



TOPICAL QUALITY ASSURANCE REPORT	REVISION 32 DRAFT A (R1001)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	06/15/99
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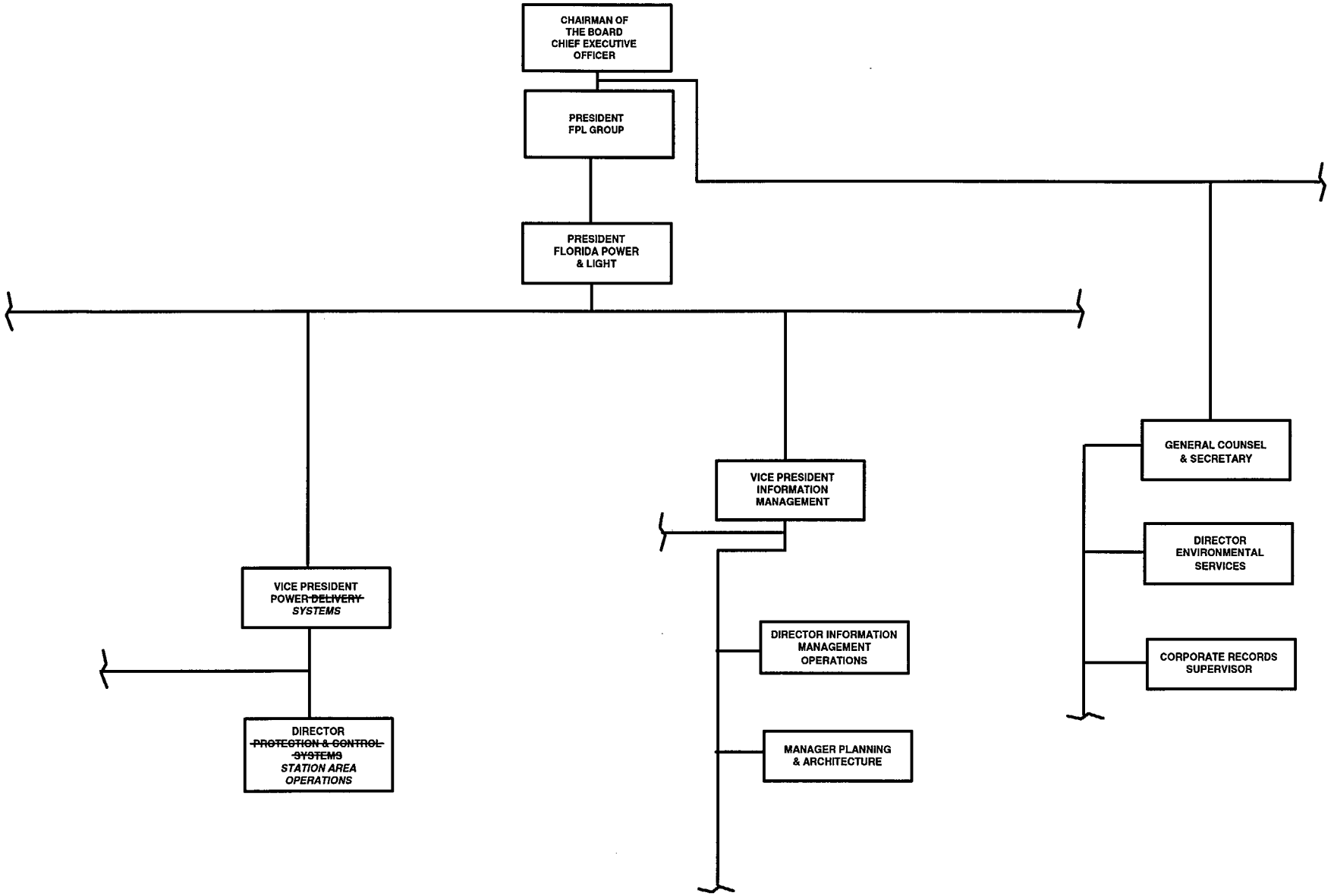

TOPICAL QUALITY ASSURANCE REPORT	REVISION 32 DRAFT A (R1001)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	06/15/99
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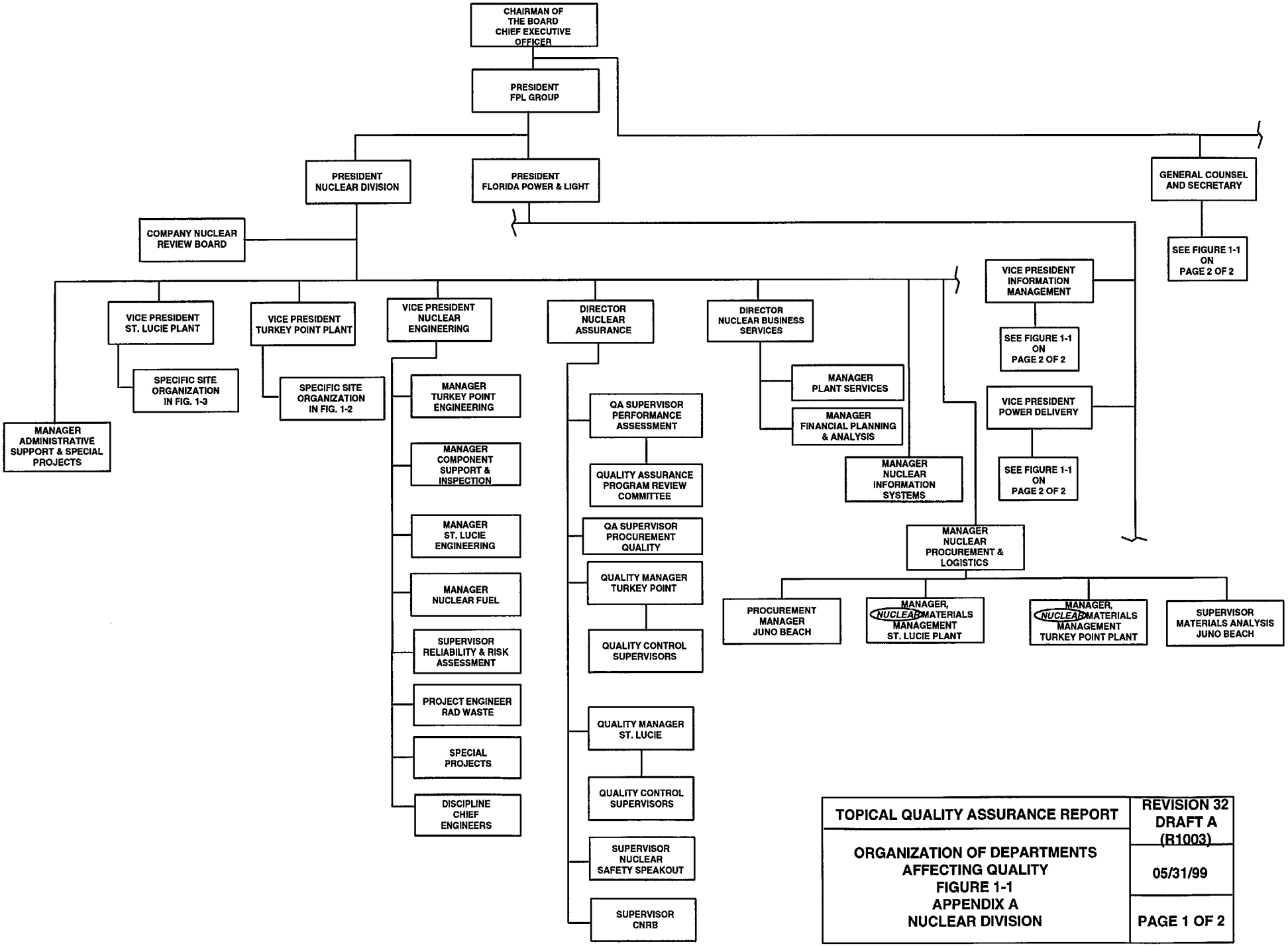

TOPICAL QUALITY ASSURANCE REPORT	REVISION 32 DRAFT A (R1003)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	05/31/99
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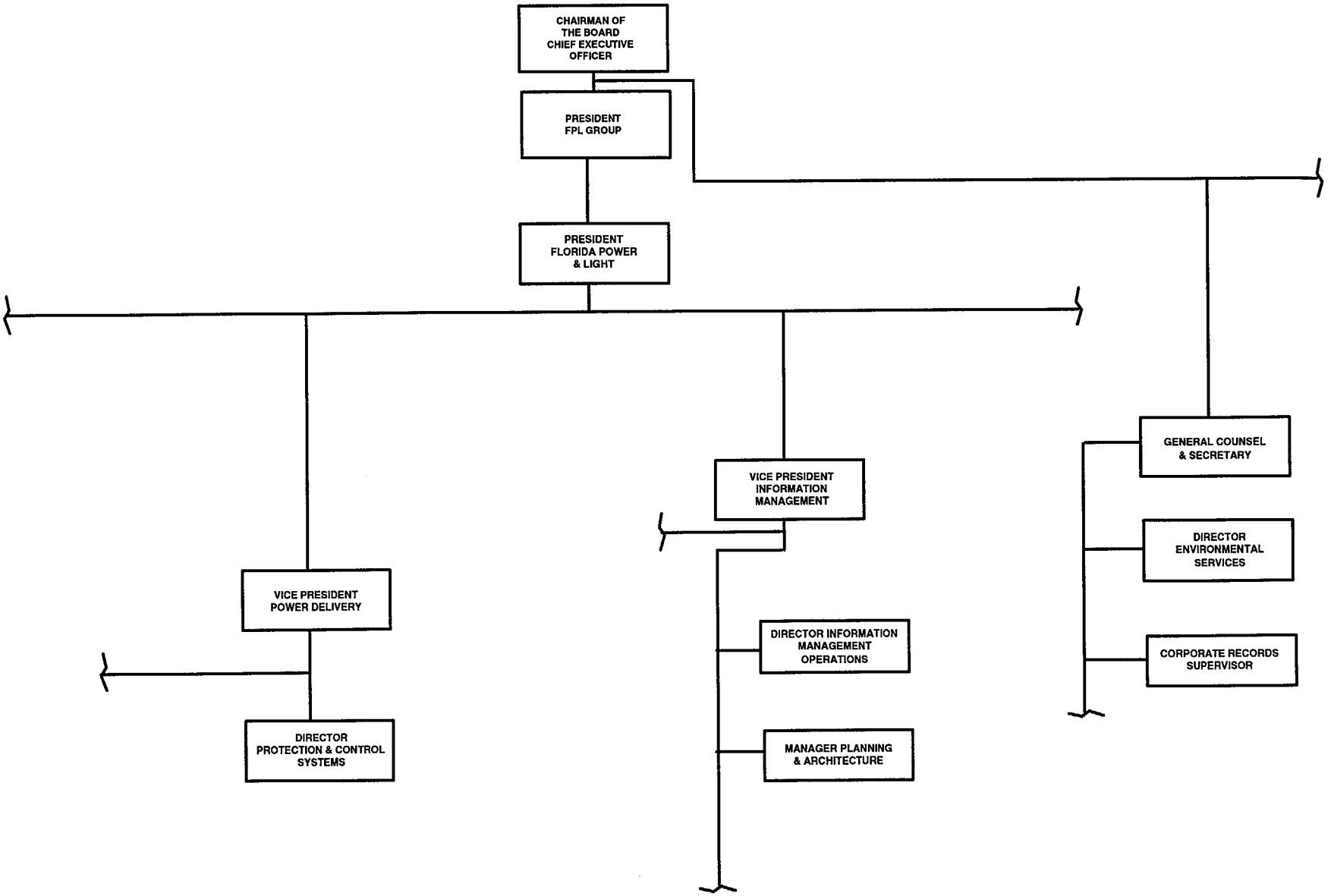

TOPICAL QUALITY ASSURANCE REPORT	REVISION 32 DRAFT A (R1003)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	06/24/99
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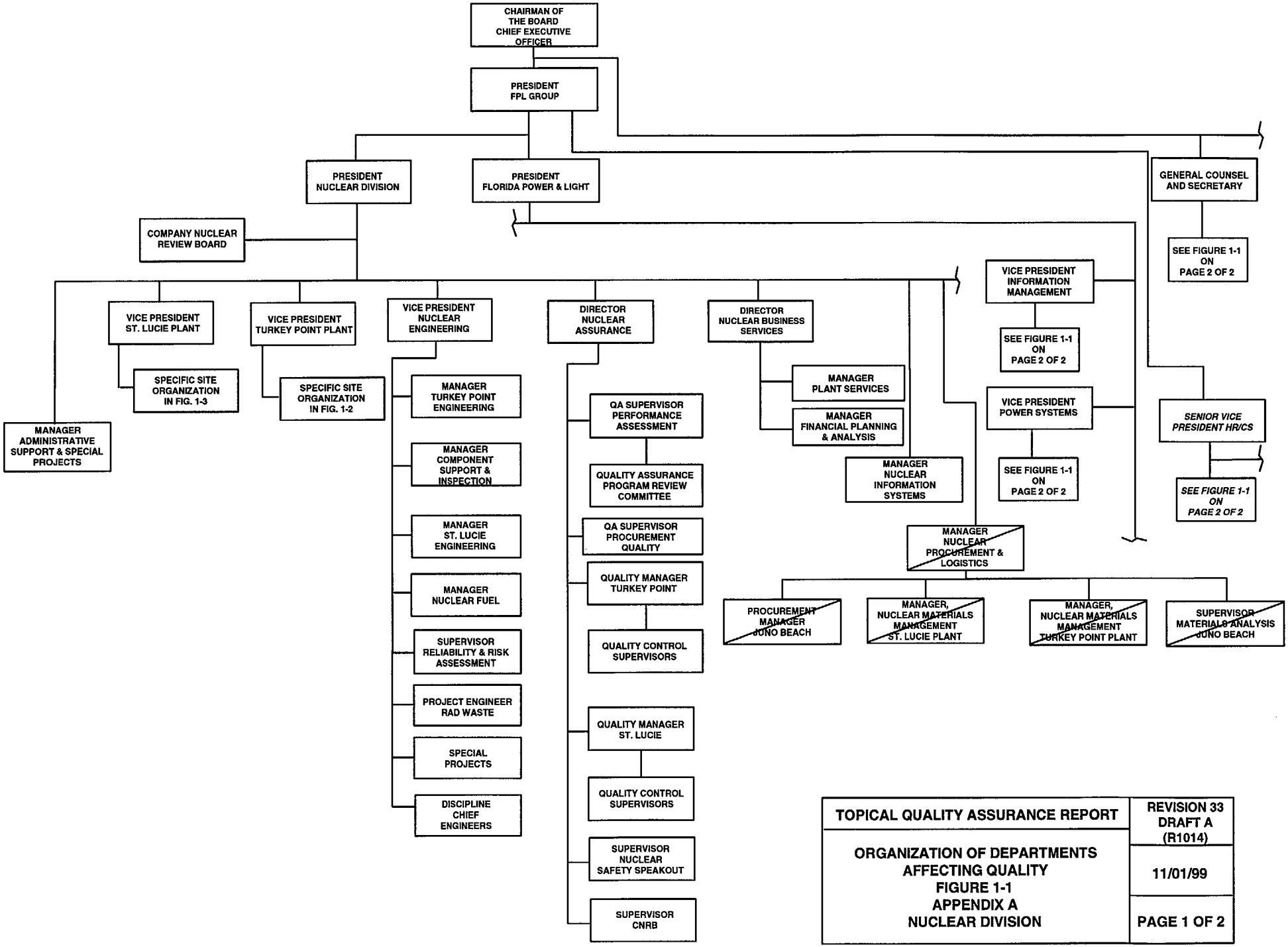

TOPICAL QUALITY ASSURANCE REPORT	REVISION 33 DRAFT A (R1014)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	11/01/99
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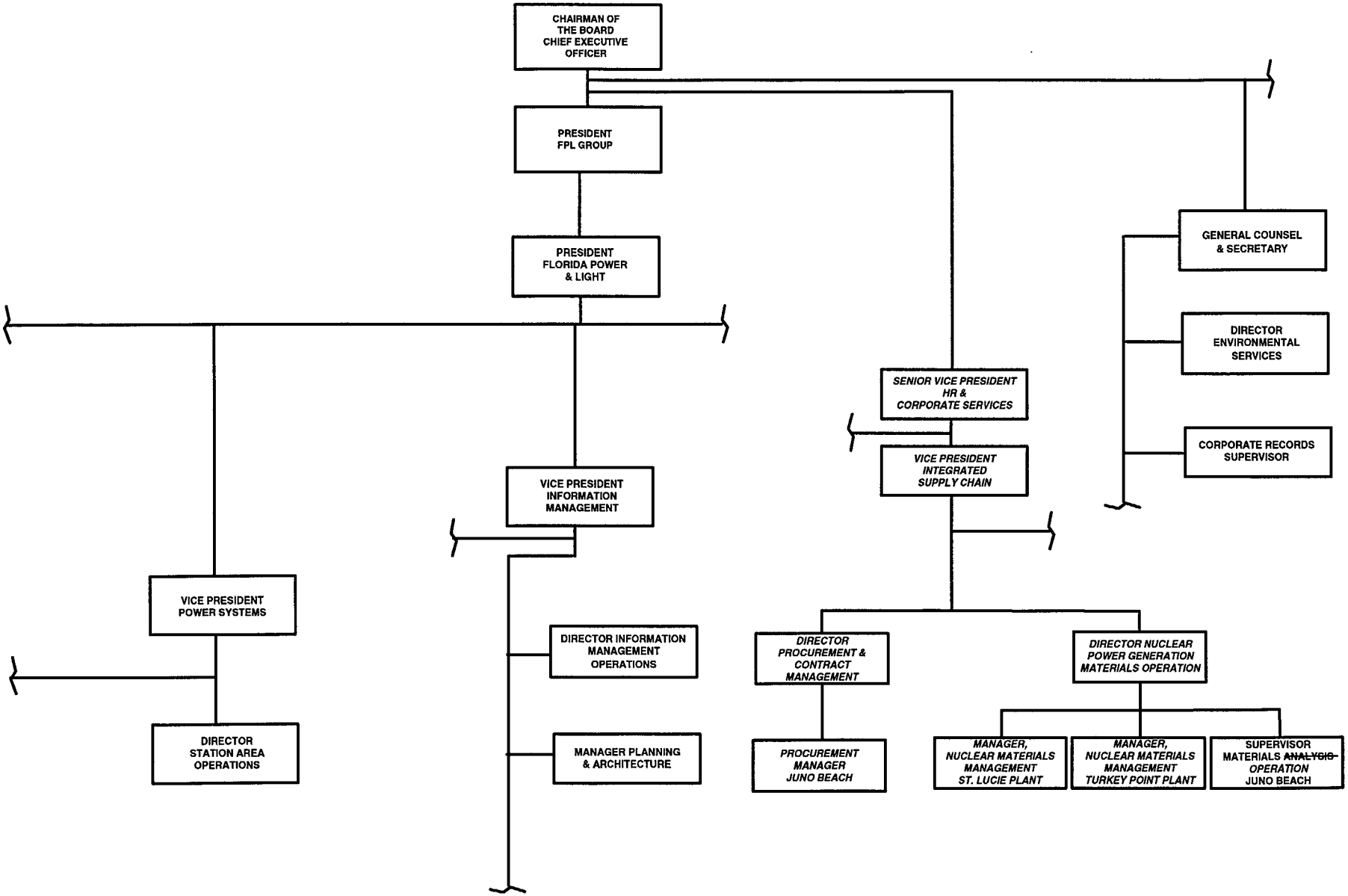

TOPICAL QUALITY ASSURANCE REPORT	REVISION 33 DRAFT A (R1014)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	11/01/99
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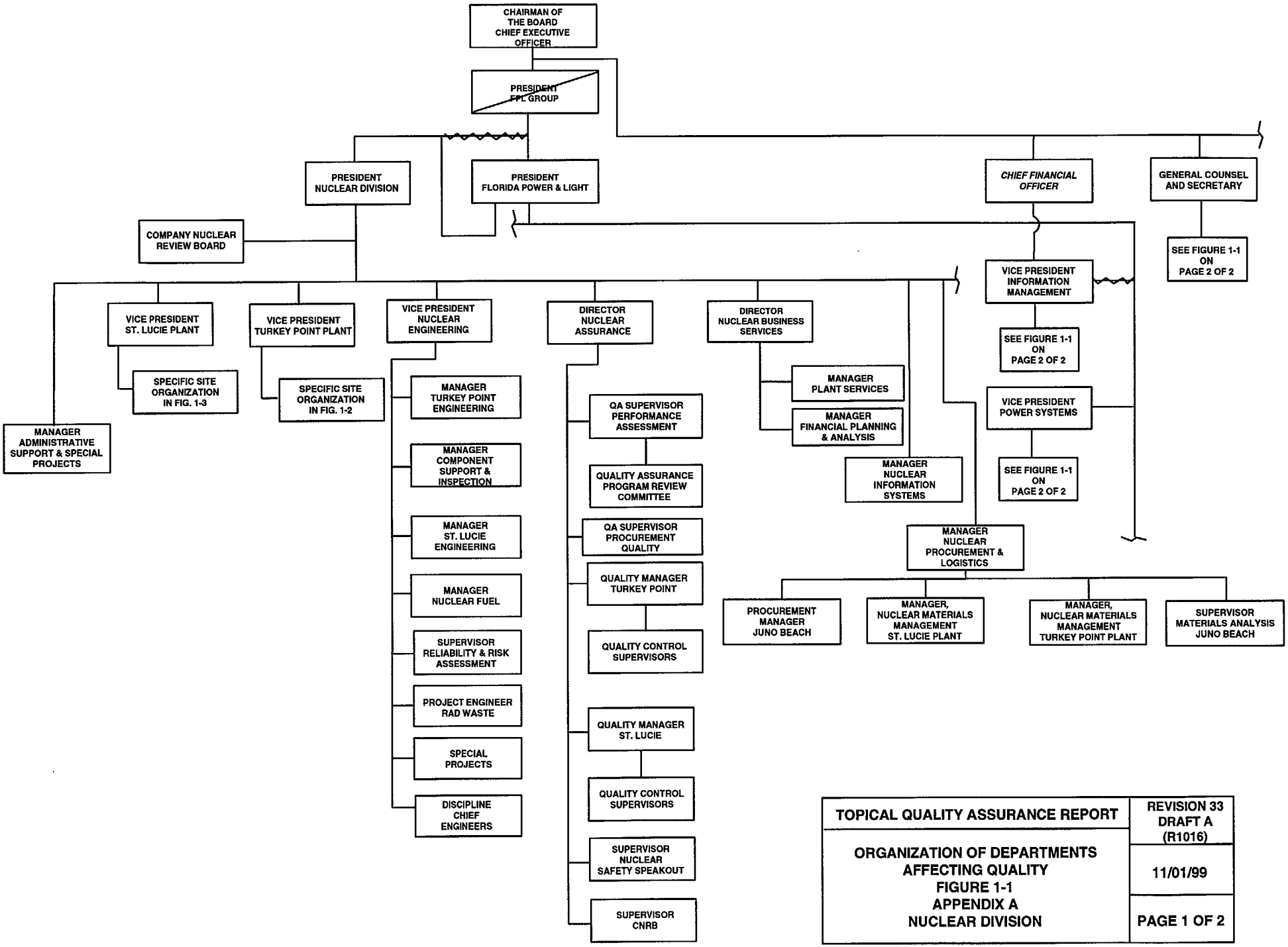

TOPICAL QUALITY ASSURANCE REPORT	REVISION 33 DRAFT A (R1016)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	11/01/99
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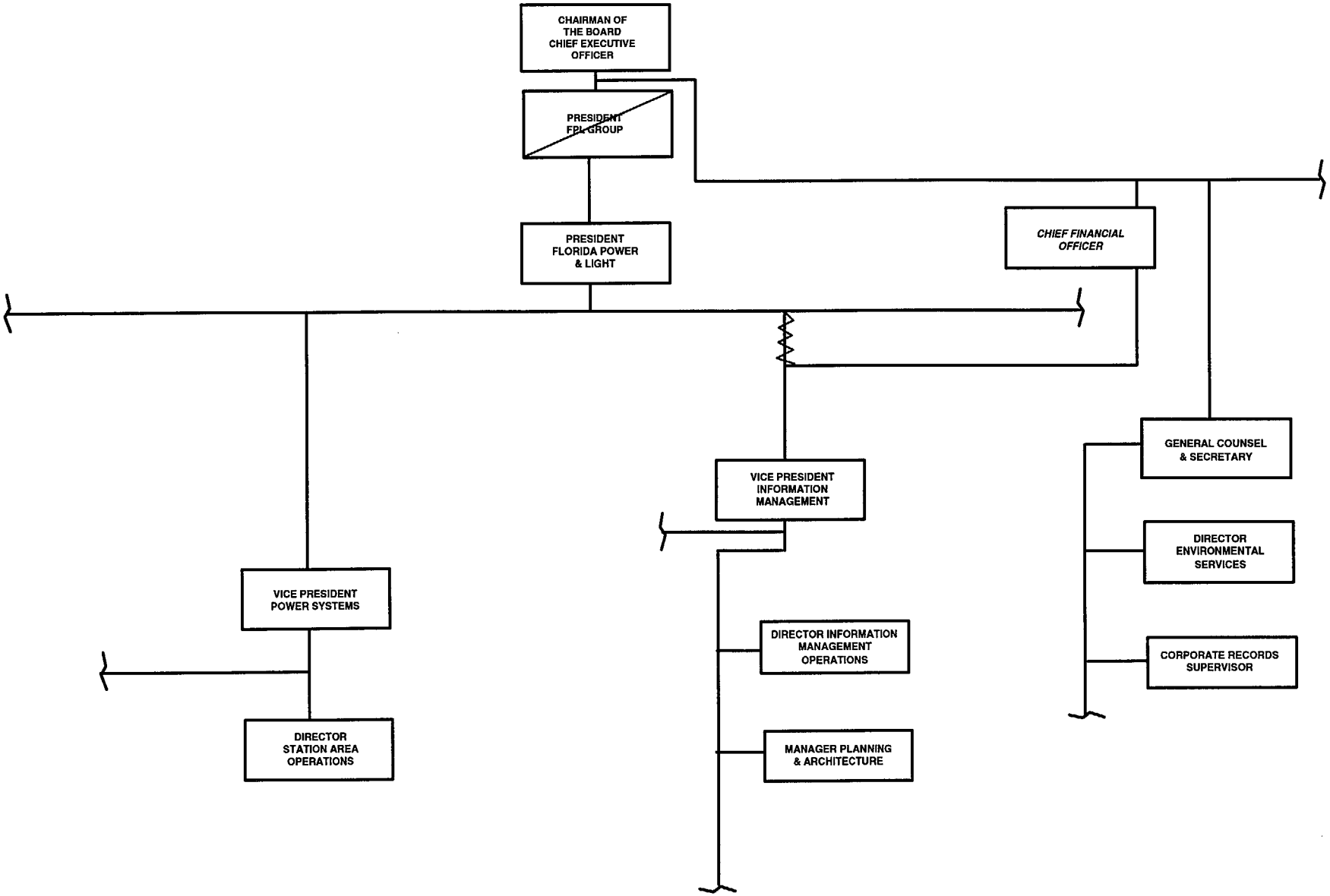

TOPICAL QUALITY ASSURANCE REPORT	REVISION 33 DRAFT A (R10016)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	11/01/99
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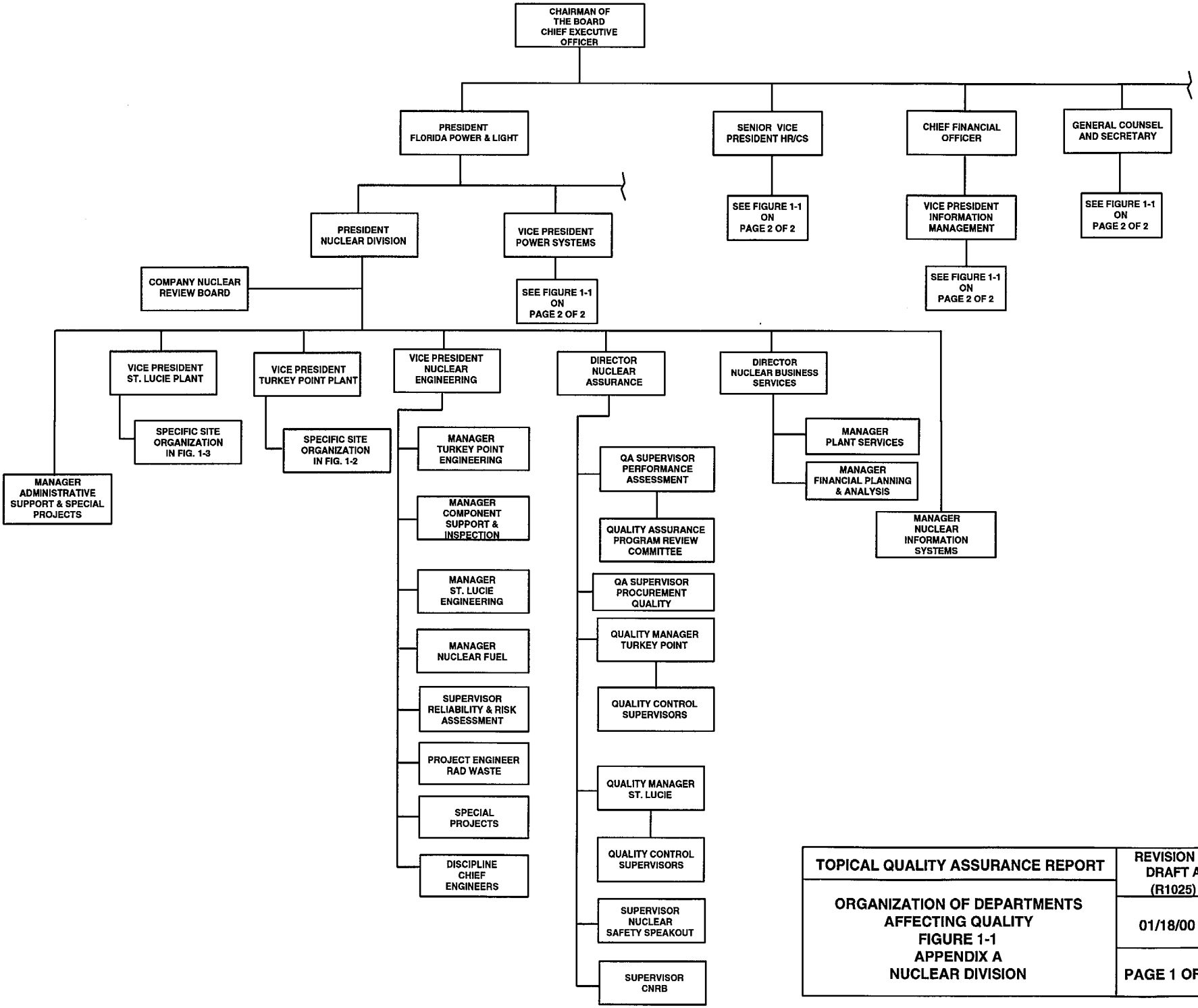

TOPICAL QUALITY ASSURANCE REPORT	REVISION 34 DRAFT A (R1025)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	01/18/00
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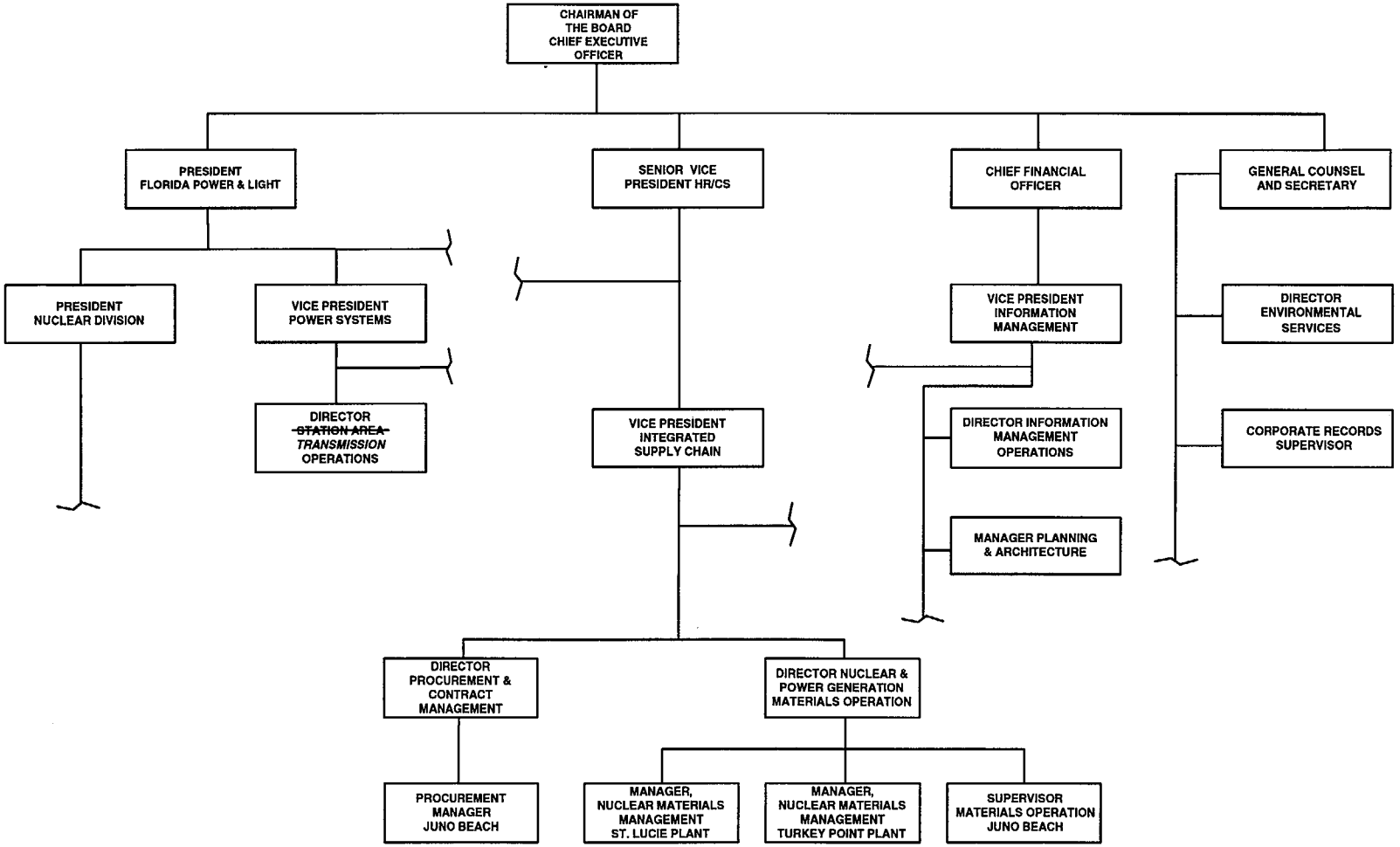

TOPICAL QUALITY ASSURANCE REPORT	REVISION 34 DRAFT A (R1025)
ORGANIZATION OF DEPARTMENTS AFFECTING QUALITY FIGURE 1-1 APPENDIX A NUCLEAR DIVISION	01/18/00
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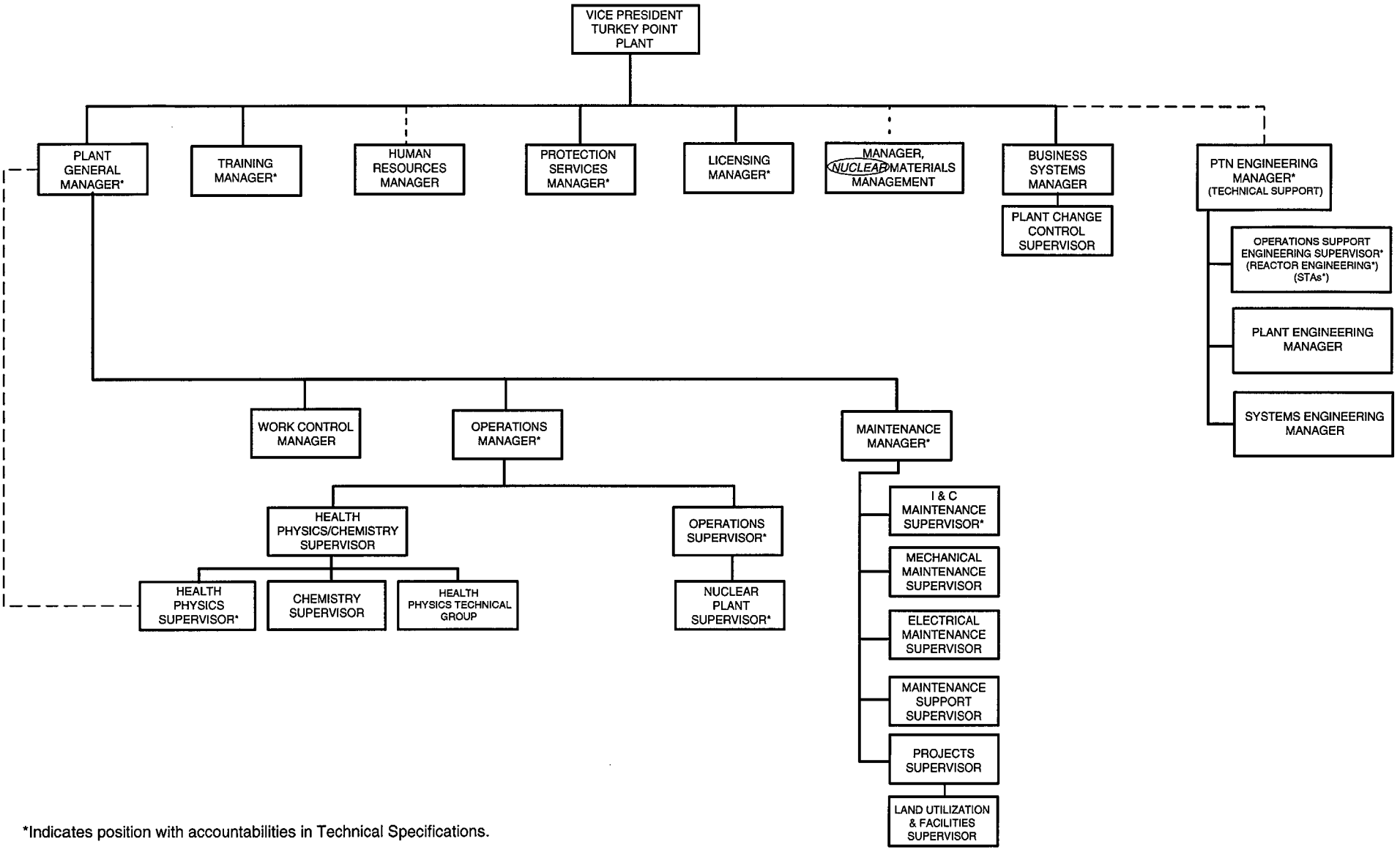

*Indicates position with accountabilities in Technical Specifications.

NOTES

Although Operations Support Engineering (OSE) personnel may report to the site Engineering Manager, the Plant General Manager shall have direct and unfettered control over those activities necessary for safe operation and maintenance of the plant.

The Health Physics Supervisor shall have direct access to the Plant General Manager for matters relating to the radiological health and safety of employees and the public.

TOPICAL QUALITY ASSURANCE REPORT	REVISION 16 DRAFT A (R1003)
TURKEY POINT PLANT SITE ORGANIZATION FIGURE 1-2 APPENDIX A	06/24/99
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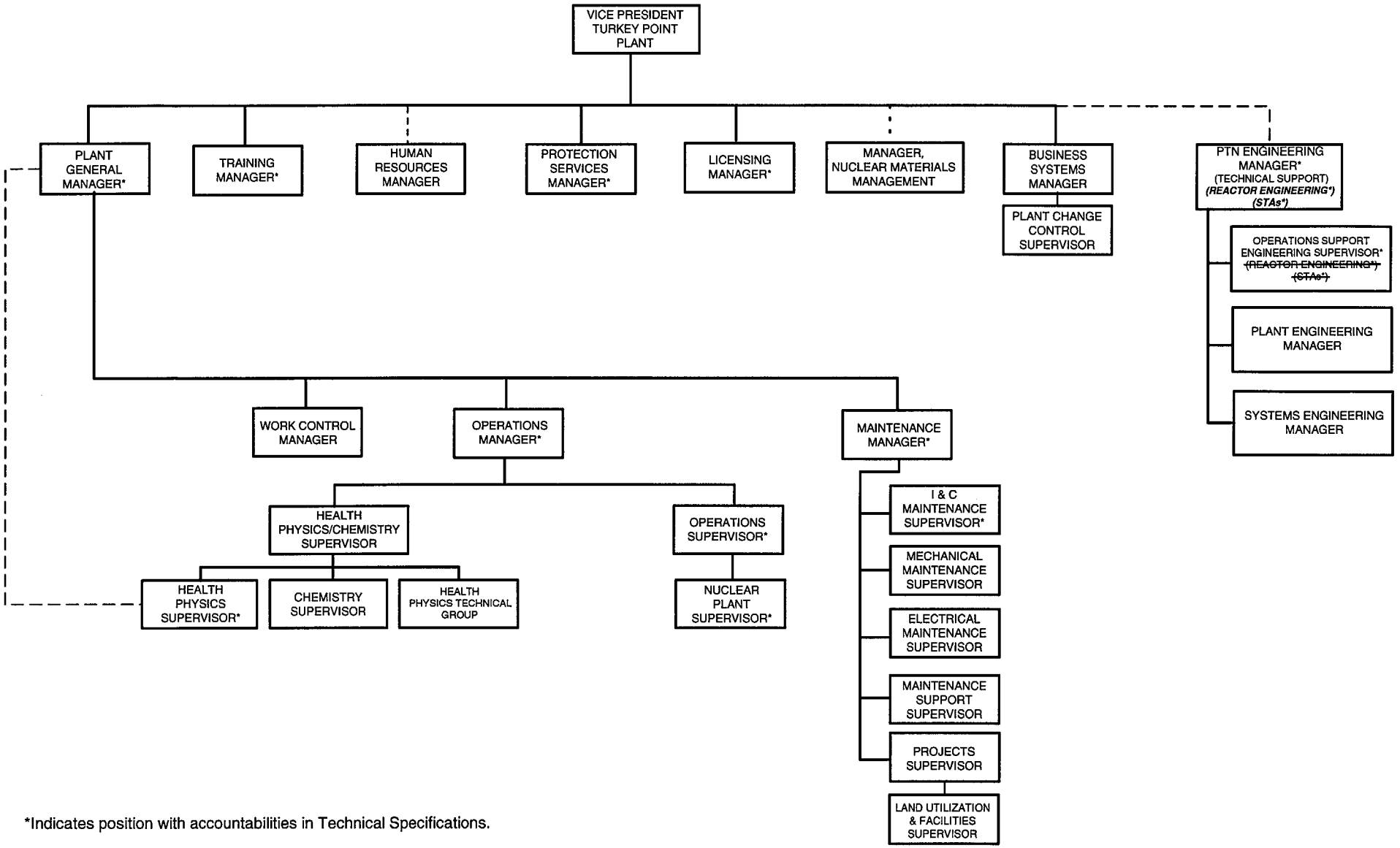

*Indicates position with accountabilities in Technical Specifications.

NOTES

~~Although Operations Support Engineering (OSE)~~ ***Reactor Engineering and STA*** personnel may report to the Site Engineering Manager ***or any group under the Site Engineering Manager***, and the Plant General Manager shall have direct and unfettered control over those activities necessary for safe operation and maintenance of the plant.

The Health Physics Supervisor shall have direct access to the Plant General Manager for matters relating to the radiological health and safety of employees and the public.

TOPICAL QUALITY ASSURANCE REPORT	REVISION 17 (R1026)
TURKEY POINT PLANT SITE ORGANIZATION FIGURE 1-2 APPENDIX A	02/02/00
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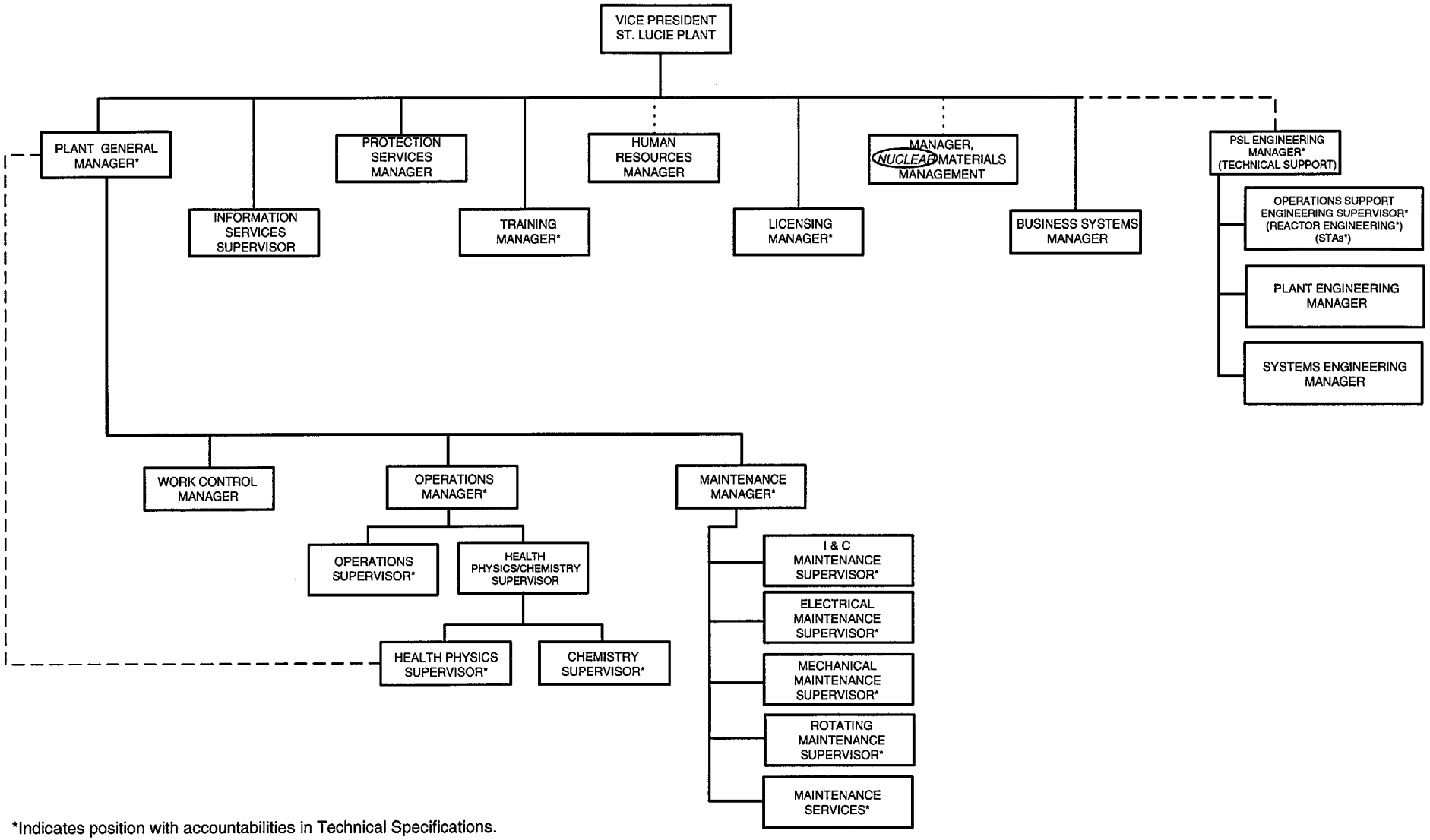

*Indicates position with accountabilities in Technical Specifications.

NOTE

Although Operations Support Engineering (OSE) personnel may report to the Site Engineering Manager, the Plant General Manager shall have direct and unfettered control over those OSE resources necessary for safe operation and maintenance of the plant.

The HP Supervisor shall have direct access to the PGM for matters relating to the Radiological Health and Safety of employees and the public.

TOPICAL QUALITY ASSURANCE REPORT	REVISION 16 DRAFT A (R1003)
ST. LUCIE PLANT, UNIT 1 & 2 SITE ORGANIZATION FIGURE 1-3 APPENDIX A	06/24/99
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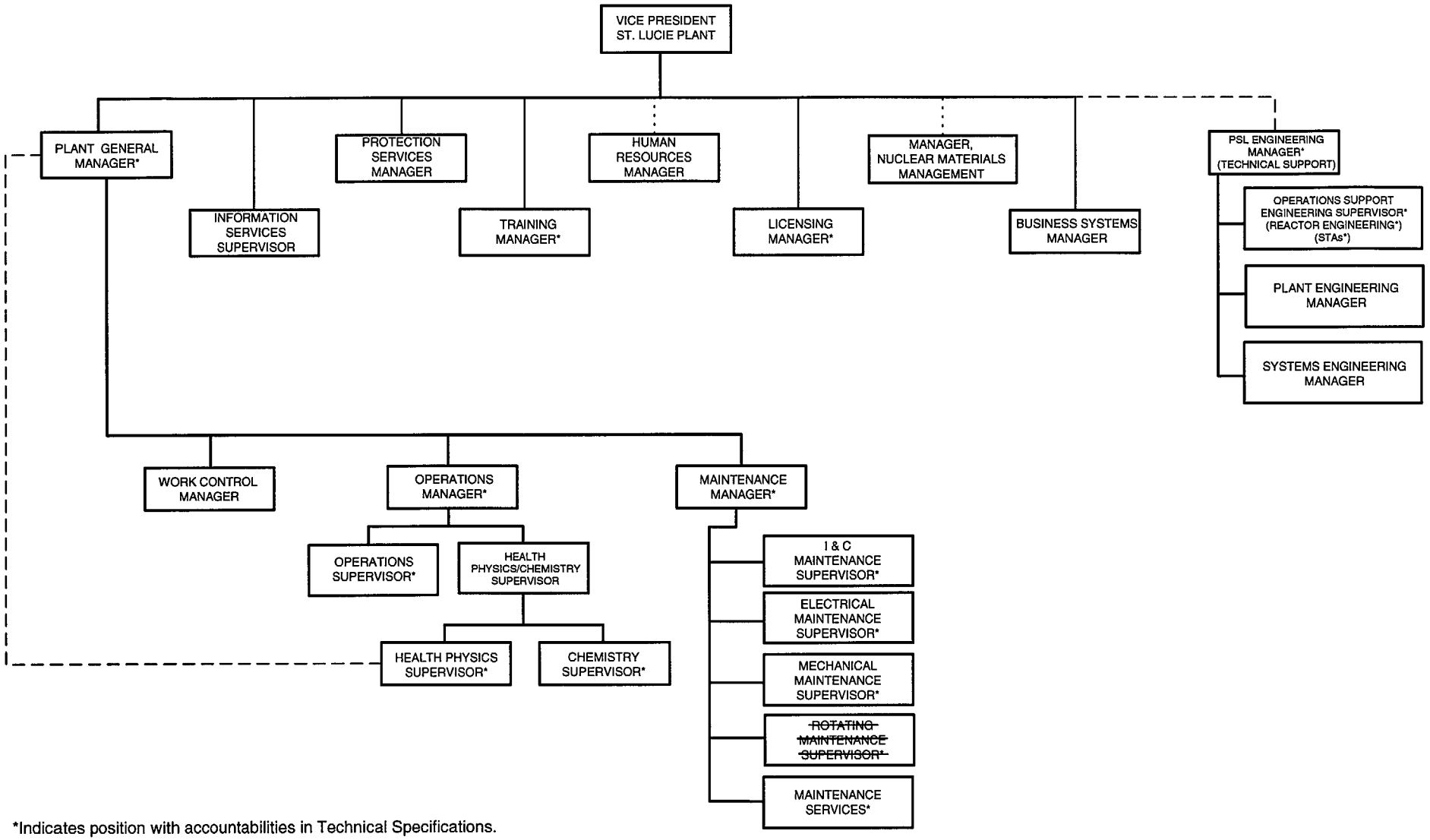

*Indicates position with accountabilities in Technical Specifications.

NOTE

Although Operations Support Engineering (OSE) personnel may report to the Site Engineering Manager, the Plant General Manager shall have direct and unfettered control over those OSE resources necessary for safe operation and maintenance of the plant.

The HP Supervisor shall have direct access to the PGM for matters relating to the Radiological Health and Safety of employees and the public.

TOPICAL QUALITY ASSURANCE REPORT	REVISION 17 DRAFT A (R1004)
ST. LUCIE PLANT, UNIT 1 & 2 SITE ORGANIZATION FIGURE 1-3 APPENDIX A	06/25/99
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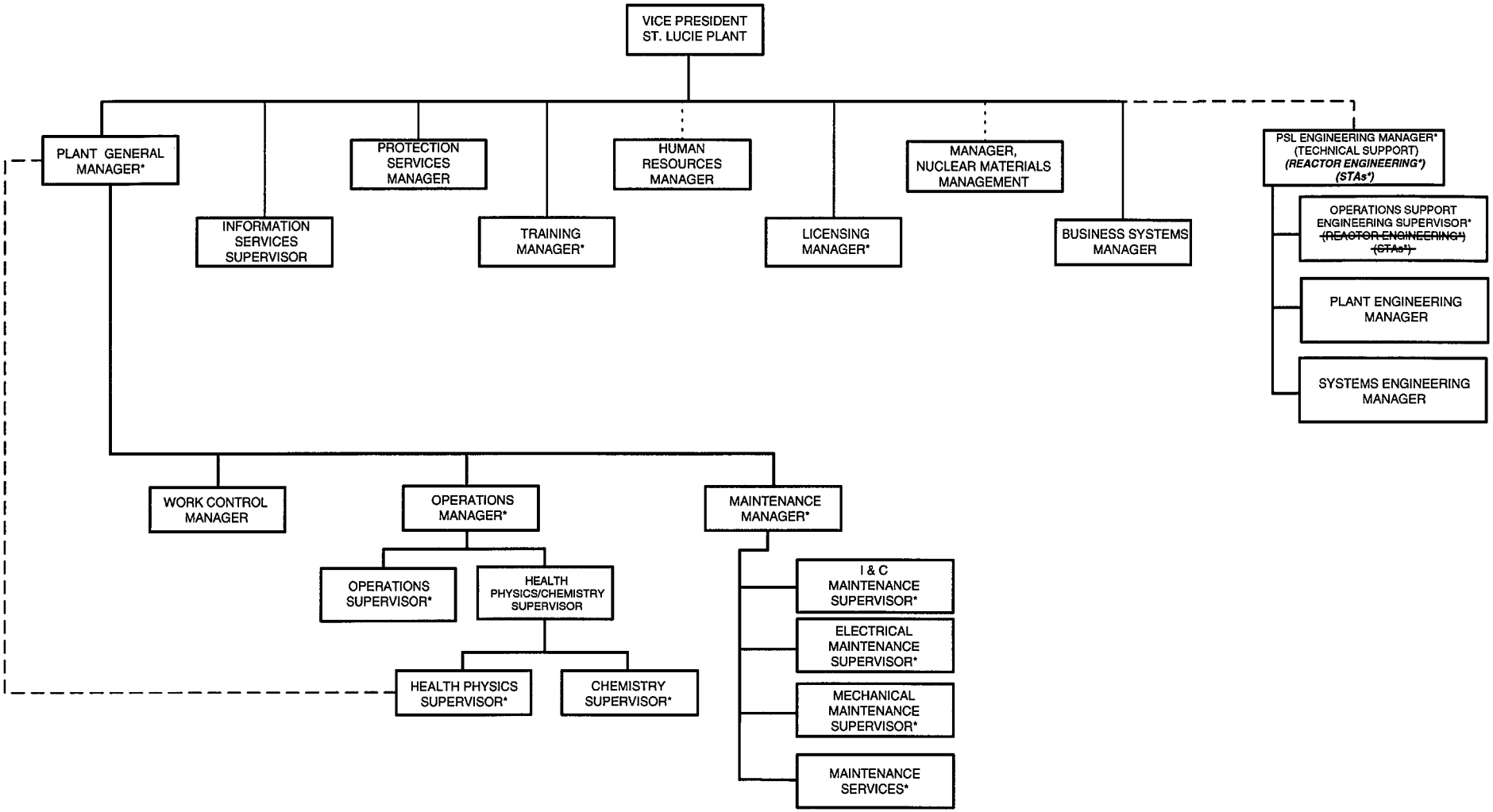

*Indicates position with accountabilities in Technical Specifications.

NOTE

~~Although Operations Support Engineering (OSE)~~ ***Reactor Engineering and STA*** personnel may report to the Site Engineering Manager ***or any group under the Site Engineering Manager*** , and the Plant General Manager shall have direct and unfettered control over those ~~OSE resources~~ ***activities*** necessary for safe operation and maintenance of the plant.

The HP Supervisor shall have direct access to the PGM for matters relating to the Radiological Health and Safety of employees and the public.

TOPICAL QUALITY ASSURANCE REPORT	REVISION 18 (R1026)
ST. LUCIE PLANT, UNIT 1 & 2 SITE ORGANIZATION FIGURE 1-3 APPENDIX A	02/02/00
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