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Carolina Power & Light Co Raleigh, NC E. E. Utley	8-12-74	8-15-74	X			

TO:	ORIG	CC	OTHER	SENT AEC PDR XXX SENT LOCAL PDR XXX
George Lear	3 signed	37		

CLASS	UNCLASS	PROP INFO	INPUT	NO CYS REC'D	DOCKET NO:
	XXX			40	50-261

DESCRIPTION:

Ltr notarized 8-12-74 trans the following re our 4-19-74 ltr.....

ENCLOSURES:

Quality Assurance Program (an amdt to FSAR)...

DO NOT REMOVE

ACKNOWLEDGED

(40 cys encl rec'd)

PLANT NAME: HB ROBINSON UNIT #2

FOR ACTION/INFORMATION 8-15-74 GMC

BUTLER (L) W/ CYS	SCHWENCER (L) W/ CYS	ZIEMANN (L) W/ CYS	REGAN (E) W/ CYS
CLARK (L) W/ CYS	STOLZ (L) W/ CYS	DICKER (E) W/ CYS	LEAR W/2 CYS
~~PARR (L)~~ W/ CYS	~~VASSALLO (L)~~ W/ CYS	~~KNIGHTON (E)~~ W/ CYS	W/ CYS
KNIEL (L) W/ CYS	PURPLE (L) W/ CYS	YOUNGBLOOD (E) W/ CYS	W/ CYS

INTERNAL DISTRIBUTION

REG FILE	TECH REVIEW	DENTON	LIC ASST	A/T IND
AEC PDR	HENDRIE	GRIMES	DIGGS (L)	BRAITMAN
OGC	SCHROEDER	GAMMILL	GEARIN (L)	SALTZMAN
MUNTZING/STAFF	MACCARY	KASTNER	GOULBOURNE (L)	B. HURT
CASE	KNIGHT	BALLARD	KREUTZER (E)	
GIAMBUSSO	PAWLICKI	SPANGLER	LEE (L)	PLANS
BOYD	SHAO		MAIGRET (L)	MCDONALD
MOORE (L)(LWR-2)	STELLO	ENVIRO	REED (E) Ltr	CHAPMAN
DEYOUNG (L)(LWR-1)	HOUSTON	MULLER Ltr	SERVICE (L)	DUBE w/input
SKOVHOLT (L) Ltr	NOVAK	DICKER	SHEPPARD (L)	E. COUPE
GOLLER (L) Ltr	ROSS	KNIGHTON	SLATER (E)	
P. COLLINS	IPPOLITO	YOUNGBLOOD	SMITH (L)	D. THOMPSON (2)
DENISE	TEDESCO	REGAN Ltr	TEETS (L) Ltr	KLECKER
REG OPR	LONG	PROJECT MGR	WILLIAMS (E)	EISENHUT
FILE & REGION (2)	LAINAS	DITTMAN (2)	WILSON (L)	THORNBURG
MORRIS	BENAROYA	HARLESS		PATON
STEELE	VOLLMER (2)			KARI

EXTERNAL DISTRIBUTION

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1 - ASLB	1-B&M SWINEBROAD, Rm E-201 GT	1-AGMED (RUTH GUSSMAN) Rm B-127 GT
1 - P. R. DAVIS	1-CONSULTANTS NEWMARK/BLUME/AGBABIAN	1-RD..MUELLER, Rm F-309 GT
16 - ACRS HOLDING		

CP&L

Carolina Power & Light Company

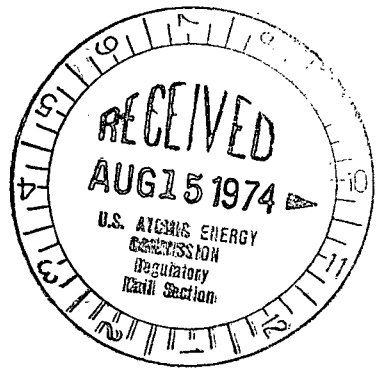
August 12, 1974

50-261

File: NG-3514

Serial: NG-74-937

Mr. George Lear, Chief
Operating Reactors Branch No. 3
Directorate of Licensing
U. S. Atomic Energy Commission
Washington, D. C. 20545



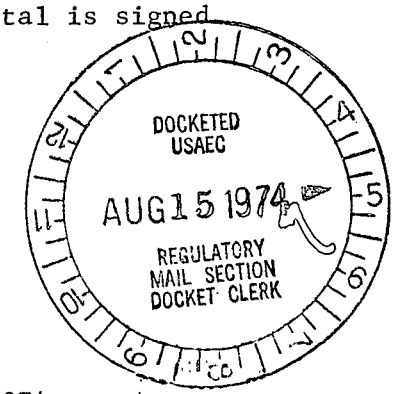
Dear Mr. Lear:

H. B. ROBINSON UNIT NO. 2
LICENSE DPR-23
QUALITY ASSURANCE PROGRAM

This is in response to your letter of April 19, 1974, requesting a detailed description of the Quality Assurance Program for H. B. Robinson Unit No. 2. The enclosed information is submitted as an Amendment to the Robinson FSAR and is intended to demonstrate compliance with Appendix B to 10CFR Part 50. Forty copies of the FSAR changes are enclosed for your review.

The Robinson No. 2 Continuing Quality Assurance Program, Volume 11 of the Operating Manual, is presently being rewritten to more completely and clearly define the methods used to comply with 10CFR50, Appendix B. This rewrite is scheduled for implementation by November 1, 1974. The enclosed FSAR Amendment is a compilation of commitments which the revised Continuing Quality Assurance Program will fulfill.

As required by Commission Regulations, this submittal is signed under oath by a duly authorized officer of the Company.



Yours very truly,

E. E. Utley
Vice President
Bulk Power Supply

GM/rt

Enclosure

Sworn to and subscribed before me this 12th day of August, 1974.

My commission expires: July 4, 1975

Margaret M. Coe
Notary Public

cc: Messrs. N. B. Bessac
W. E. Graham
J. B. McGirt
G. McGovern
D. V. Menscer
D. B. Waters
R. A. Watson

REGULATORY DOCKET FILE COPY

336 Fayetteville Street • P. O. Box 1551 • Raleigh, N. C. 27602

8450

CAROLINA POWER & LIGHT COMPANY
H. B. ROBINSON UNIT 2
DOCKET NO. 50-261

INSTRUCTION SHEET

This amendment contains information relevant to the H. B. Robinson Continuing Quality Assurance Program. Each revised page bears the date August, 1974, in the upper right hand corner. The following page removal and insertions should be made to incorporate these page changes into the FSAR.

REMOVE (Existing Pages)		INSERT (Amendment Pages)
Table of Contents	1-ii	1-ii
	1-iv	1-iv
Section 1	None	1.10-1 through 1.10-31

TABLE OF CONTENTS (Continued)

LIST OF FIGURES

1.10 Continuing Quality Assurance Program

General

The general purpose of the Continuing Quality Assurance Program is to assure that the installed quality of the Robinson Plant is maintained. The program complies with 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants" and is consistent with the guidelines provided in AEC Safety Guide 1.33, ANSI N18.7, and ANSI N45.2. The description of the program as contained in this amendment is organized under headings I-XVIII, corresponding to the eighteen criteria contained in 10CFR50, Appendix B.

Policy

It is the policy of Carolina Power & Light Company to implement the Robinson Continuing Quality Assurance Program with the commitments stated in the following summary.

I. ORGANIZATION

A. General

The CP&L organization responsible for the Robinson Continuing QA Program is shown in Figure 1.10-1. The Executive Vice-President, Engineering, Construction & Operation Group is responsible to the President for the implementation and effectiveness of the Corporate QA Program. That portion of the Corporate QA Program which is applicable to Robinson will be embodied in Part 2 of the Corporate QA Manual. He operates through three Departments to provide for all QA/QC functions and operations activities for the Robinson Plant. He arranges, through the Finance Group, for purchasing services in support of the plant.

Administrative control for Robinson extends from the Executive Vice-President to the Robinson Plant Manager as shown in Figure 1.10-1. The Vice-President, Bulk Power Supply Department has overall responsibility for power production and for the implementation and effectiveness of the Robinson Continuing QA Program. To accomplish this he operates through the Manager, Nuclear Generation Section and the Manager, Quality Assurance Section. The Manager, Nuclear Generation Section has overall responsibility for nuclear plant operations and the Manager, QA Section has overall responsibility for providing supporting QA functions to the Manager, Nuclear Generation and the Robinson Plant Manager. He operates through members of his staff to provide direct support to the plant Engineering and QA Supervisor.

The Plant Manager reports to the Manager, Nuclear Generation and is responsible for safe and efficient operation of Robinson in accordance with the operating license and requirements of the Technical Specifications and Operating Manual. He directs and coordinates Robinson operations through the Operating, Engineering and QA, Maintenance, Environmental and Radiation Control, and Administrative Groups.

The Engineering and QA Supervisor is responsible under the Plant Manager for QA/QC functions at the plant. He conducts a continuing surveillance program over all plant QA/QC activities and assigns members of his staff to perform specific QA and/or QC functions and tasks.

The Manager, Quality Assurance and Training Audit (QA&TA) Section, Special Services Department, is responsible for independent audits of CP&L and its vendors and contractors to verify compliance with their respective QA programs and to evaluate the effectiveness of these programs. QA audit reports are submitted simultaneously to the President, Executive Vice-President, and other levels of CP&L management, as appropriate. This procedure ensures that all levels of management receive the original report without editing by intermediate management.

Group Supervisors and other levels of management assigned responsibilities in the Continuing QA Program may delegate authority (including approvals) and assign functions within their responsibilities, except when expressly prohibited. The assignee is responsible for the quality of his performance. However, the individuals designated in this amendment retain responsibility for timely and adequate performance. Higher authority in the same organizational line may act for the individual designated in this volume and assume responsibility for the function.

CP&L organizations and supporting companies supplying technical services or products for safety-related (Q-list) plant items or involved with design, modification, operation, or maintenance of safety-related plant systems shall comply with the following requirements:

1. The authority and duties of individuals, groups and organizations performing quality assurance functions shall be clearly established and delineated in writing. They shall have sufficient authority and organization freedom to:
    a. Identify quality problems.
    b. Initiate, recommend, or provide solutions for conditions adverse to quality.

c. Verify implementation of solutions.

2. An individual, group or organization assigned responsibility for checking, auditing, inspecting, or otherwise verifying that an activity has been correctly performed shall be independent of the individual or group directly responsible for performing the specific activity.

B. SPECIFIC RESPONSIBILITIES

Manager - Nuclear Generation Section

The Manager, Nuclear Generation provides for supporting QA functions for the plant by arranging for specific assistance from the QA Section and Nuclear Engineering Sections of the Power Plant Engineering (PPE) Department and the QA Section in the Bulk Power Supply Department. He also arranges for licensing and technical support from the Licensing and Technological Services Section of the Special Services Department.

Manager - QA Section Bulk Power Supply Department

Responsible to the Vice-President, Bulk Power Supply Department for coordinating with the Manager, Nuclear Generation and the Plant Manager in establishing and monitoring QA requirements during the startup and test phase of plant operation and during subsequent plant operation. He is specifically responsible for:

1. Coordinating QA support for the plant from other CP&L organizations to resolve quality problems affecting the plant.
2. Dissemination of quality information among the plants.
3. Relaying quality problems relating to the plant to the appropriate management levels in the General Office to expedite corrective action.
4. Assisting in the orientation and training of supervisors with respect to QA/QC functions.
5. Recommending Continuing QA Program changes to the Plant Manager for approval and assisting in program development.
6. Notifying the Engineering and QA Supervisor of new or revised regulations and industry codes and standards that affect QA/QC functions.

7. Responding to requests from the plant for technical assistance in QA matters.
8. Reviewing in-plant surveillance reports and, when appropriate, reporting results to the Vice-President, Bulk Power Supply Department; Manager, Nuclear Generation; and Plant Manager.

Manager - QA Section, PPE Department

Responsible for providing QA assistance relating to purchasing for the plant. He acts in response to authorized requests to provide:

1. Quality data in purchasing documents.
2. Vendor or Contractor qualification for the purchase order or contract.
3. Shop inspections and surveillance.
4. Corrective action by Vendors and Contractors.

Manager - QA&TA Section, Special Services Department

Responsible for the conduct of independent audits of plant quality-related activities and specifically responsible for:

1. Determining that a Quality Assurance program has been developed and documented in accordance with Company and regulatory requirements.
2. Verifying by examination and evaluation of objective evidence that the documented program has been implemented.
3. Assessing the effectiveness of the Quality Assurance program.
4. Identifying program nonconformances and if appropriate, recommend solutions.
5. Verifying correction of identified nonconformances.

Plant Manager

Specific QA responsibilities include:

1. Approval of revisions to the Technical Specifications, FSAR and Operating Manual procedures.
2. Authorization of operating schedules, plant modifications, and corrective action for nonconforming items and conditions.
3. Approval of purchase requisitions for release by the plant.

4. Providing for plant personnel indoctrination, training, and retraining.
5. Providing for plant surveillance, testing, and inspections.

Engineering and QA Supervisor

Responsible for:

1. Directing QC services at the plant by contractors.
2. Reporting quality-related problems to any plant staff member for correction.
3. Stopping maintenance or modification work which, in his opinion, does not meet specifications.
4. Reporting quality-related problems to the Manager - QA, Bulk Power Supply Department to expedite corrective action when nonplant action is necessary.
5. Reviewing modification, procurement and plant work documents, the plant Operating Manual and other plant procedures and instructions to assure that quality requirements are adequately prescribed.
6. Requesting technical assistance from the QA Section, Bulk Power Supply Department, and QA or QC support in procurement from the QA Section, PPE Department.
7. Providing receiving inspection instructions, when necessary, for vendor products received at the plant.
8. Ensuring holdpoints have been inserted in work control documents and conducting inspections and witnessing for maintenance and modification of the plant.
9. Advising the Training Coordinator regarding indoctrination, training, and qualification for QA/QC functions.
10. Providing directives or checklists for accumulation of documentary evidence of quality and other QA records for retention and maintains the plant QA records.
11. Conducting surveillance of the plant, reporting results to the Plant Manager, other plant personnel, and when appropriate, to the Manager, Nuclear Generation and the

Manager, QA, Bulk Power Supply Department, and following up to assure that corrective action is taken, when necessary.

12. Evaluating the effectiveness of the Continuing QA Program, and as appropriate, recommending revisions to the Plant Manager for approval.

In addition to the above, he is responsible for the control of plant modifications, engineering data, and providing technical assistance to the other Group Supervisors. He directs, or coordinates and reviews, design and engineering support by other CP&L organizations and contractors.

Operating Supervisor: Responsible for plant systems operation and refueling in accordance with the Technical Specifications, FSAR and Operating Manual. He maintains the operations volumes of the Operating Manual.

Maintenance Supervisor: Responsible for plant maintenance and modification in accordance with the Operating Manual, approved trouble tickets, and work instructions. He maintains the maintenance volumes of the Operating Manual. He supervises maintenance and modification by CP&L forces and directs or coordinates maintenance and modification services by contractors. He advises the Training Coordinator regarding maintenance training and personnel qualification. Responsible for providing material control and identification, including initiating control documentation for deficient items, receiving inspection and storage of Q-list equipment, material and spare parts.

Administrative Supervisor: Responsible for maintenance of reference files of design documents, plant modifications, and quality-related procedures.

Stores Foreman: Responsible for material receipt inspection, material identification, documentation of material nonconformances and material control.

Training Coordinator: Responsible for conducting the operator training program and assisting Group Supervisors in training and indoctrinating plant personnel and others doing maintenance or modification work at the plant. He is responsible for maintaining operator training and licensing records, and qualification and training records for other personnel.

Manager - Nuclear Plant Engineering Section(s) PPE Department: Provides design and engineering assistance in response to approved requests for specific services to interpret, update, or prescribe regulatory, code or standard requirements in design documents.

Manager - Licensing and Technological Services, Special Services Department: Provides licensing and safety analysis support for the plant in response to authorized requests. This support includes, as appropriate, technical assistance in preparing documentation and liaison services with the AEC.

Director - Purchasing Department, Finance Group: Responds to approved requisitions to obtain quotations, as necessary, and award purchase orders.

II. QUALITY ASSURANCE PROGRAM

A. Preparation and Implementation

The Quality Assurance Program will be described and implemented by written policies and procedures and will be carried out throughout plant life.

B. Regular Program Assessment

The scope, implementation, and effectiveness of the Continuing QA Program shall be regularly assessed for compliance with 10CFR50 Appendix B, AEC Regulatory Guide 1.33, ANSI N18.7, and ANSI N45.2. The timely coordination and ultimate recommendations of these regular assessments shall be the prime responsibility of the Robinson Plant Manager. The initial issue of Volume 11 of the Plant Operating Manual (The Continuing Quality Assurance Program) is approved by the Plant Manager, Manager - Nuclear Generation Section and the Vice President - Bulk Power Supply Department, while subsequent revisions are approved by the Plant Manager. In addition, audits conducted under the direction of the Manager - Quality Assurance and Training Audit shall be reported to the CP&L President, Executive Vice President - Engineering, Construction and Operation Group, Vice President - Special Services Department and the associated plant management for their review.

C. Communication

The Manager QA Section, Bulk Power Supply Department, is responsible for transmitting and communicating to responsible plant individuals the QA policies, manuals, procedures, new and revised regulations, codes, and standards affecting QA/QC functions that are required under the Continuing QA Program.

D. Criteria Matrix

Each of the criteria of 10CFR50 Appendix B shall be cross-referenced with the applicable sections of Volume 11 of the Operating Manual in the form of a matrix.

E. Safety-Related Structures, Systems, and Components

The safety-related structures, systems, and components subject to the QA Program are listed in Volume 11 of the Operating Manual.

F. Supporting Companies

CP&L utilizes the services of other Companies to provide materials and/or augment and support its staff in selected plant operations, or modification and maintenance projects. To qualify for this work, they must meet the following requirements:

1. Document and execute a QA Program that meets the requirements of the Robinson Continuing QA Program and which provides for control, planning, and verification of assigned activities that may affect the quality of Q-list plant elements.
2. Demonstrate technical capability, experience and facilities commensurate with purchase order or contract requirements for products or services supplied.

After purchase order or contract award, the Vendor or Contractor shall conduct all quality-related activities for nuclear safety-related and other designated plant items at the plant and other locations in accordance with his QA Program.

Vendor Responsibilities

Vendors are responsible to the Maintenance Supervisor for products, spare parts and materials delivered to the plant. Vendors shall perform their functions in accordance with the purchase order and their QA Program. A Vendor's responsibilities will include, as appropriate to the purchase order:

1. Development or revision of design documents, fabrication drawings and procurement specifications required for the assigned scope of work.
2. Control of the release of documents prepared or revised by himself or revised by himself or his Subvendors.

3. Control of his procurement to verify that the products conform to the procurement specifications.
4. Control of products and materials to assure that identification and traceability of items is maintained at all times, and proper handling, storage and shipping is performed to prevent deterioration or damage.
5. Planning and preparation for production, including:
    a. Planning work, and providing work-control documents and technical procedures to those responsible for performing the work.
    b. Indoctrinating and training personnel performing activities affecting quality.
    c. Qualifying special process procedures, personnel, and equipment, as required.
    d. Implementing technical procedures for quality control functions (e.g., calibration control).
    e. Providing for inspections and tests appropriate to the importance, complexity and quantity of products supplied. This will include noting mandatory holdpoints on work control documents, and providing inspection instructions, test procedures, and special test equipment and supplies.
6. Production in accordance with specifications and work-control documents, including observance of all holdpoints, stopping work not in conformance with specifications, documenting performance and results, and maintaining surveillance of all quality-related activities.
7. Control of nonconforming material, including disposition and corrective action.
8. Direction and monitoring of Subvendors to assure compliance with requirements and specifications.
9. Accumulation and organization of documents and records required for the quality assurance records of the plant.
10. Audits and surveillance including followup, as necessary, to assure that his own and his Subvendors' QA Programs are applied properly and are effective.
11. Providing for shipping and preservation of products and materials until received and accepted at the plant.

Contractor Responsibilities

Contractors (including an Architect-Engineer) are responsible to the Engineering and QA Supervisor for engineering and QA/QC services. Contractors are responsible to the Maintenance Supervisor for maintenance and modification services at the plant. They are responsible to the Operating Supervisor for operations services and consulting. Responsibilities will include, as appropriate to the contract:

1. Control of the release of new and revised documents prepared by himself and his subcontractors.
2. Accumulation and organization of design documents describing the "as installed" structures and systems during a modification project (Architect-Engineer).
3. Audits and surveillance including followup, as necessary, to assure that his own and subcontractors' QA Programs are applied properly and are effective.

G. Indoctrination and Training

QA Program indoctrination and training of plant personnel will be conducted and, as appropriate, qualifications will be achieved, maintained, and documented. In addition, vendors and contractors are required to train, qualify, and certify the proficiency of their personnel with respect to QA Program functions. Training will include the following:

1. Periodic indoctrination of supervisory personnel responsible for activities which could affect safety-related plant components, parts, and material.
2. Personnel instruction in the performance and documentation of material inspections, process- and test-witnessing, and equipment calibration control. (This training will include on-the-job practice).
3. On-the-job training of individuals performing plant surveillance.
4. Personnel training to achieve skills required in the performance of special welding processes, such as welding, heat treating, and nondestructive examinations.

Training will be conducted in a formal atmosphere, either on-the-job, in the classroom, or through other organizations as appropriate. Training will be scheduled as deemed appropriate by the plant Supervisors and attendance will be mandatory for all designated personnel. Attendance records will be maintained.

III. DESIGN CONTROL

For design of new systems, changes thereto, and plant modifications as appropriate, the following requirements apply:

1. Procedures shall be developed to assure that design activities are carried out in a planned, controlled, and orderly manner.
2. Applicable regulatory requirements and design bases will be correctly translated into specifications, drawings, procedures, and instructions.
3. Appropriate quality standards shall be specified and included in design documents and that deviations and changes from such standards will be controlled.
4. Suitable design analyses, as appropriate, will be performed where applicable.
5. Interface controls, both external and internal, shall be described and controlled between participating organizations, particularly in the areas of review, approval, release, distribution, and revision of interface documents.
6. Design verification will be performed using methods such as design reviews, alternate calculations, or qualification testing.
7. Design verification shall be performed by personnel other than those who performed the original design, but may be from the same organization.
8. Design documents, including revisions, shall be reviewed for adequacy, approved for release by authorized personnel, and properly distributed in accordance with written procedures. Obsolete or superseded documents will be controlled to prevent their inadvertent use.
9. A comprehensive system of planned and documented audits shall be established and conducted on all phases of the design process by a qualified unit independent of the designer.
10. Design reviews shall be documented and filed in a controlled area for future reference.
11. Design documents, records, and changes thereto shall be collected, stored, and maintained in a systematic and controlled manner.

12. Plant modifications shall be subjected to control measures which are comparable to those applied to the original design and shall be approved by the designated CP&L organization.

IV. PROCUREMENT DOCUMENT CONTROL

1. Procedures will be established which clearly delineate the sequence of actions to be accomplished in the preparation, review, approval, and control of procurement documents and which identifies those positions or groups responsible for performing those functions.
2. Review and concurrence of the procurement documents shall be performed by qualified individuals knowledgable in QA to assure that the quality requirements are sufficiently, clearly and accurately stated. This review is to determine that all quality requirements be correctly stated, that they can be inspected and controlled, that there be adequate acceptance and rejection criteria, and that the procurement document has been prepared in accordance with CP&L QA Program procedure requirements.
3. Documented evidence of the review and approval of procurement documents shall be provided and available for verification.
4. Procurement documents shall contain or reference, as applicable, basic technical requirements such as regulatory requirements, component identification, drawings, specifications, codes and industrial standards (including their revision status), tests and inspection requirements, and special process instructions for such activities as fabrication, cleaning, erecting, packaging, handling, shipping, storing, inspecting, etc.
5. Procurement documents shall contain, as applicable, requirements which identify the documentation to be prepared, maintained, submitted, and made available to the Purchasing Agent for review and/or approval, such as drawings, specifications, procedures, inspection and fabrication plans, inspection and test records, personnel and procedure qualifications, and material, chemical and physical test results.
6. As appropriate, procurement documents will contain the right of access to the vendor's facilities and records for source inspection and audit by CP&L.
7. Revisions to procurement documents, other than editorial, shall be subject to at least the same review and approval requirements as the original document.

V. INSTRUCTIONS, PROCEDURES, AND DRAWINGS

1. Activities affecting quality shall be prescribed by documented procedures, instructions, or drawings, as appropriate.
2. Such procedures, instructions, or drawings shall include appropriate quantitative acceptance criteria, such as dimensions, tolerances, or operating limits, or qualitative acceptance criteria, such as workmanship samples, for determining that important QA functions have been satisfactorily accomplished.

VI. DOCUMENT CONTROL

1. Measures shall be established to review documents, such as instructions, procedures, and drawings (and changes thereto) prior to release to assure that the quality requirements are sufficiently, clearly, and accurately stated.
2. Changes to documents shall be reviewed and approved by the same organizations that performed the original review and approval unless delegated by the appropriate CP&L organization to other qualified responsible organizations.
3. Approved changes shall be promptly included into instructions, procedures, drawings, and other appropriate documents.
4. Obsolete or superseded documents shall be controlled to prevent their inadvertent use.
5. Documents shall be available at the start of the work for which they are needed.
6. A master list(s) which identifies the current revision number of documents, such as procedures, drawings, and specifications shall be established. This list(s) shall be updated and distributed as necessary to predetermined responsible personnel.
7. As a minimum under this criteria, the controlled documents shall include:
    a. Design specifications
    b. Design, manufacturing, construction, and installation drawings
    c. Manufacturing, inspection, and testing procedures
    d. Procurement documents
    e. All volumes of the Plant Operating Manual
    f. In-service Inspection Procedures

VII. CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

1. Evaluation of suppliers shall be determined by qualified personnel competent in determining the ability of suppliers to provide acceptable quality products. Qualified QA and Engineering personnel (e.g., Engineering and QA Supervisor; QA Section, Nuclear Plant Engineering Section; and QA Section, Bulk Power Supply Department) will participate in the evaluation of those suppliers providing critical and/or nuclear safety-related components. Source selection will be based on one or more of the following:
    a. The ability of the supplier to comply with those elements of 10CFR50 Appendix B applicable to the type of material, equipment, and services being procured.
    b. A review of previous records and performance of suppliers which have supplied similar articles of the type being procured.
    c. A survey and evaluation of the potential supplier's facilities and QA Program. Results of these surveys will be documented.
2. Surveillance requirements of suppliers during fabrication, inspection, testing, and shipment of materials, equipment, and components will be determined in advance and performed in accordance with written procedures to assure conformance to the purchase order requirements. These procedures will provide for:
    a. Instructions which specify those characteristics or processes to be witnessed, inspected or verified; describe the method of surveillance and the extent of documentation required; and specify those responsible for implementing these instructions.
    b. Audits or surveillance to assure that the supplier complies with all quality-related requirements. Surveillance will be performed on those items where verification of procurement requirements cannot be determined upon receipt.
3. Receiving-inspection of the supplier furnished material, equipment, and services shall be performed in accordance with the following:
    a. The material, equipment, or component be properly identified and correspond with the receiving documentation.

b. Inspection of the material, component, or equipment (including the acceptance records) be performed and judged acceptable in accordance with predetermined inspection instructions prior to installation or use.

c. Items accepted and released be identified as to their inspection status and forwarded to a controlled storage area or released for installation or further work.

d. Nonconforming items be held in a segregated controlled area and clearly identified until proper disposition is made.

VIII. IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS

1. Procedures shall be established which describe identification and control of materials, parts, and components including partially fabricated sub-assemblies.
2. Identification requirements shall be determined during the initial planning stages (i.e., during generation of specification and design drawings).
3. Measures shall be provided so that items requiring identification can be traced to the associated documentation, such as drawings, specifications, purchase orders, manufacturing and inspection documents, and physical or chemical mill test reports.
4. Consideration will be given to assure that the location and method of identification do not affect the function or quality of the item being identified.
5. Measures for the verification of correct identification of material, parts, and components shall be required prior to release for manufacturing, shipping, construction, and installation.

IX. CONTROL OF SPECIAL PROCESSES

1. Measures shall be established to assure adequate performance and control of special processes such as welding, heat treating, and nondestructive testing.
2. Measures shall be established to assure that special processes are performed by qualified personnel using qualified procedures in accordance with applicable codes, standards, and specifications. Inspection or process results will be documented.
3. An active file shall be maintained and kept current on qualification records of all special process procedures and personnel performing special processes. These records shall be reviewed periodically to insure qualifications have not expired.

X. INSPECTION

1. Inspection personnel shall be independent from the individual or group performing the activity being inspected.
2. Inspection procedures, instructions and/or checklists shall be provided which identify the date performed, by whom and/or by what equipment, the type of observation, the results, the data collected and its acceptability.
3. Inspection procedures or instructions shall be available for use prior to performing the inspection operation.
4. Measures shall be provided for qualifying the inspectors and maintaining the current status of each inspector's qualifications.
5. Measures shall be established to assure that inspection equipment is within calibration limits prior to performing an inspection operation.
6. Inspection of modification, repairs, and replacement items shall be performed in accordance with original design and inspection requirements as necessary to verify acceptability.

XI. TEST CONTROL

1. Tests required to demonstrate that the item will perform satisfactorily in service shall be identified, documented, and accomplished in accordance with written controlled procedures.
2. Tests will include, as appropriate, prototype qualification tests, proof tests prior to installation, preoperational tests, and periodic tests during plant operation.
3. Written test procedures shall be prepared which incorporate or reference the requirements and acceptance limits contained in applicable design and procurement documents.
4. The written test procedures shall include, as appropriate:
    a. Instructions for testing method, test equipment, instrumentation, and item preparation.
    b. Test prerequisites, which include such items as:
        Calibrated instrumentation
        Adequate equipment
        Trained, qualified, and licensed or certified personnel
        Preparation, condition, and completeness of item to be tested
        Suitable and, if required, controlled environmental conditions
    c. Provisions for data collection and storage.
    d. Mandatory inspection holdpoints for witness by CP&L, contractor, or authorized code inspector.
    e. Acceptance and rejection criteria.
    f. Methods of documenting or recording test data results.
5. Test results shall be documented, evaluated, and acceptance status identified by a qualified responsible individual or group.

XII. CONTROL OF MEASURING AND TEST EQUIPMENT

1. Procedures shall be established which describe the calibration technique, calibration frequency, maintenance and control of all measuring and test instruments, tools, gages, fixtures, reference standards, transfer standards, and nondestructive test equipment to be used in the measurement, inspection, and monitoring of safety-related components, systems, and structures.
2. Measuring the test equipment shall be uniquely identified and have traceability to the calibration test data.
3. Measuring and test instruments shall be calibrated and maintained at specified intervals based on the required accuracy, purpose, the degree of usage, stability characteristics, and other conditions affecting the measurement. However, for instruments used infrequently, a specific calibration interval does not have to be identified, in which case the instrument must be calibrated prior to use.
4. When measuring and test equipment is found to be out of calibration, an investigation will be conducted and documented to determine the validity and acceptability of previous inspections performed.
5. Calibrating instruments shall have known valid relationships to a nationally recognized standard. If no national standard exists, the basis for calibration shall be documented.
6. Records shall be maintained which indicate the complete status of all items under the calibration system and reflect the previous and next calibration dates.
7. Calibration facilities used for calibrating sensitive and close tolerance measuring and test equipment shall provide an environment that is sufficiently controlled to allow the measuring device to be evaluated and calibrated to its required accuracy.

XIII. HANDLING, STORAGE, AND SHIPPING

1. Special requirements for handling, storage, shipping, cleaning and preservation of material and equipment shall be specified in appropriate documents, such as procedures, specifications, or work and inspection instructions to prevent damage or deterioration.
2. When necessary, special protective environments such as inert gas atmosphere, or moisture or temperature controlled environments shall be specified and provided for.

XIV. INSPECTION, TEST, AND OPERATING STATUS

1. Measures, through the use of labels, stamps, tags, record cards, or other suitable means, shall be established to indicate the status of inspections and calibrations performed on such items as tools, gages, installed plant instruments, and test equipment.
2. The status of nonconforming, inoperative, or malfunctioning structures, systems or components shall be clearly identified by a suitable means, such as tagging, to prevent inadvertent use.
3. Measures shall be established to control the use of inspection and status indicators, including the authority for application and removal of tags, marking, and labels.
4. Measures to preclude bypassing of required inspections, tests, and other critical operations will be controlled through documented procedures.

XV. NONCONFORMING MATERIALS, PARTS, OR COMPONENTS

1. Measures and procedures shall be established to control the identification, documentation, segregation, review, disposition, and notification of the affected organization of nonconformance of materials, parts, components, or services.
2. Documentation shall be provided which clearly identifies the nonconforming item, describes the nonconformance and disposition of the nonconformance, inspection requirements, and includes signature approval of the disposition.
3. Measures shall be established and documented defining the responsibility and authority for determining the disposition of nonconforming items and approving the disposition.
4. Where feasible, nonconforming items shall be segregated from other acceptable items and uniquely identified as nonconforming until properly dispositioned for use.
5. Repair or rework of nonconforming items shall be accomplished and inspected in accordance with approved procedures.
6. Nonconformance items which are dispositioned for "use as is" or "repair" shall be formally approved by the Plant Manager.
7. Nonconformance reports shall be made part of QA records.

XVI. CORRECTIVE ACTION

1. Evaluation of nonconformance and determination of the need for corrective action shall be accomplished in accordance with established procedures.
2. Measures shall be established to determine the cause of the nonconformance of installed equipment and institute corrective action to preclude the recurrence of those significant conditions adverse to quality.
3. Measures shall be established to follow up on corrective actions to assure proper implementation and close out the corrective action documentation.
4. Measures shall be established to document and report to appropriate levels of management significant conditions adverse to quality cause of the conditions, and corrective action taken.

XVII. QUALITY ASSURANCE RECORDS

1. Records shall be prepared and maintained to provide documentary evidence of the quality of items and of activities affecting quality.
2. These records shall include such items as: operating logs; results of reviews; inspections; tests; audits; monitoring of work performance; material analyses; qualification of personnel, procedures, and equipment; drawings, specifications; procurement documents; calibration procedures and reports; and nonconforming and corrective action reports.
3. Records shall be identified and retrievable.
4. Inspection and test records shall contain the following, as appropriate:
    a. Description of the type of observation
    b. Identification of the inspector or data recorder
    c. Results and acceptability of the inspection or test
    d. Action taken in connection with any deficiencies noted
5. Consistent with applicable regulatory requirements, measures shall be established and implemented in accordance with approved procedures to control the distribution and retention of records, covering such items as duration of retention, storage location, and assigned responsibilities.

XVIII. AUDITS

1. A comprehensive system of planned and documented audits by the QA and TA Section, Special Services Department, will be carried out to verify compliance with all aspects of the Robinson Continuing QA Program. These audits will consist of both internal audits of the plant and other CP&L organizations and external audits of CP&L contractors, subcontractors, and vendors performing activities covered by the Robinson Continuing QA Program.
2. The purpose of these audits will be to objectively evaluate quality-related practices, procedures, and instructions; the effectiveness of implementations; and the conformance with policy directives.
3. The scope of audits will include the evaluation of work areas, activities, and processes and the review of documents and records.
4. Audits will be performed in accordance with written procedures or checklists and conducted by appropriately trained personnel not having direct responsibilites in the areas being audited.
5. Audit results shall be documented and reviewed by management having responsibility in the area audited.
6. Deficient areas shall be reaudited until corrections have been accomplished.
7. Audits shall be regularly scheduled on the basis of status and safety importance of activities being performed and be initiated early enough to assure effective quality assurance during the design, procurement, and contracting activities.

CP&L ORGANIZATION FOR THE
ROBINSON CONTINUING QA PROGRAM

August, 1974

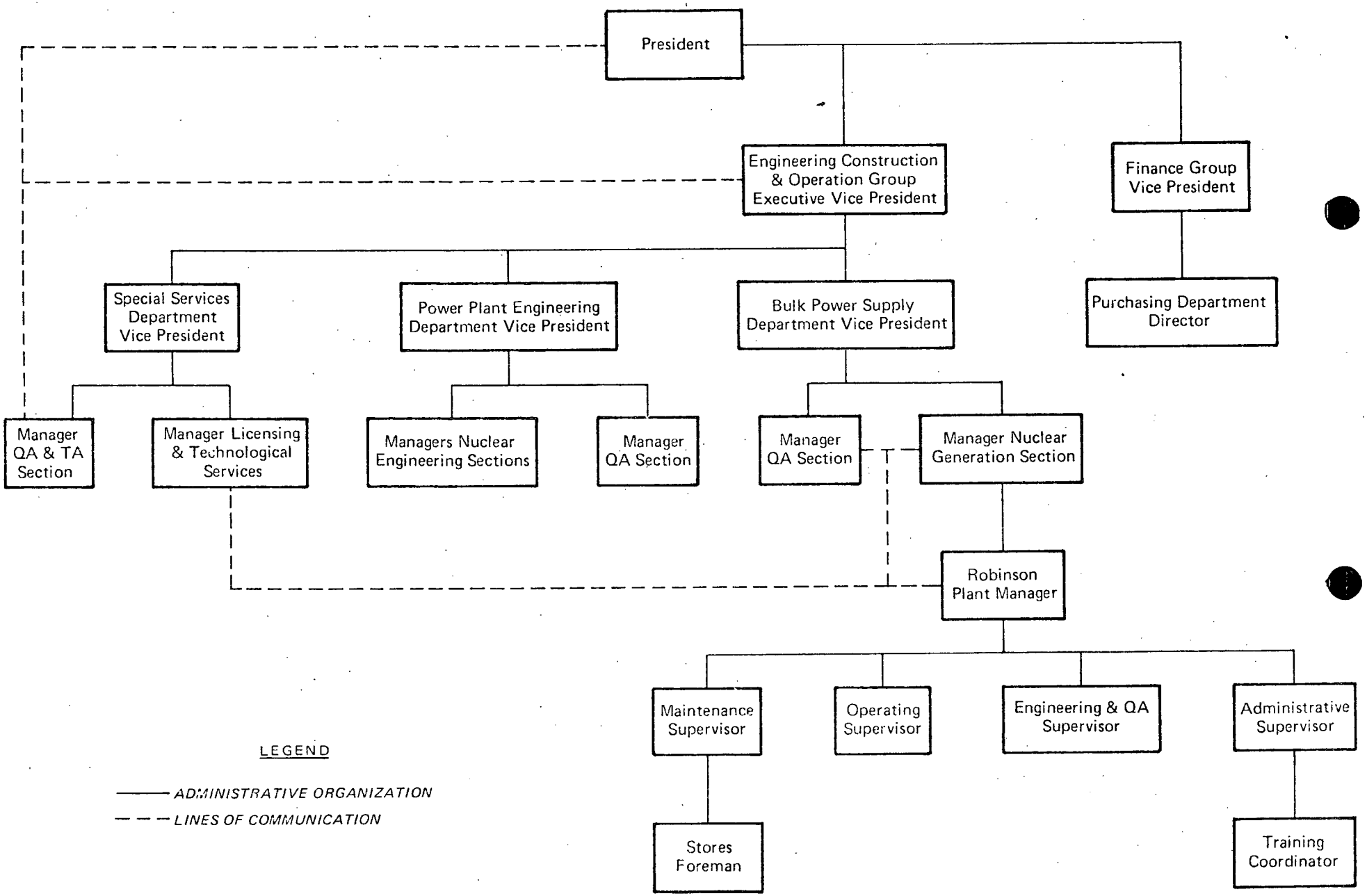


Figure 1.10–1