Changes to Section 1.8

of the SHNPP PSAR

1) The second sentence on page 1.8-1 of the PSAR should be revised to read, "This plan will not be affected by the decision to delay inservice operation of the Harris Units until 1986 and 1990."

2) At the end of Item 2 on page 1.8-1i of the PSAR add the following, "This procedure has been replaced by CP&L's Corporate Quality Assurance Department procedure CQAD-80-1 titled 'Procedure for Corporate QA Audits'", which became effective January 19, 1982.

3) Paragraph 3a and 3b on pages 1.8-1j, 1.8-1k, and 1.8-1l should be replaced with the following:

Quality Assurance Services Section Procedures - Listed below are the subject procedures.

a. Engineering QA and Vendor Surveillance Units Procedures:

AQAS-1	Quality Assurance Document Control	29,44,49
AQAS-2	Initiation, Revision, and Withdrawal of Procedures	QS1-38
AQAS-3	Contractor and Vendor Evaluations	Q1.14
AQAS-4	Quality Assurance Records	
AQAS-5	Handling Reportable Items Under 10CFR50.55(e)	
AQAS-9	Training and Qualification of Engineering QA and Vendor Surveillance Personnel	
EQA-1	Review of Documents for Quality Assurance Requirements	
VQA-2	Vendor Shop Surveillance	
VQA-5	Preparation and Maintenance of Approved Suppliers List	

Listed below is a cross reference of the 10CFR50 Appendix B Criteria to the procedures covering the criteria.

NRC Criteria	QA Section Procedures Covering Quality Assurance Criteria
Criterion II	AQAS-1, AQAS-2, AQAS-3, AQAS-4, AQAS-5, AQAS-9, EQA-1, VQA-2, VQA-5
Criterion III	EQA-1
Criterion IV	EQA-1, VQA-5, AQAS-3
Criterion VI	AQAS-1, AQAS-2

Criterion VII	VQA-2, VQA-5, AQAS-3
Criterion XVII	AQAS-4

b. Site Quality Assurance/Quality Control Unit Procedures - The following is a list of procedures included in the Site QA/QC Procedures.

CQA	General Section
CQA	Appendix A Quality Assurance Forms
CQA-1	Personnel Training and Qualification
CQA-4	QA Records
CQA-24	Procument Control
CQA-27	System/Structure Turnover
CQA-28	QA Surveillance
CQC-1	Tool and Measuring Device Control
CQC-2	Nonconformance Control
CQC-6	Receiving Inspection
CQC-7	Marking and Tagging
CQC-10	Cleanliness Control of Fluid Systems and Components
CQC-13	Concrete Control
CQC-15	Cadweld Control
CQC-19	Weld Control
CQC-20	Post Weld Heat Treatment

Nondestructive Examination Procedures contained in the following sections of the Corporate Nondestructive Examination Manual:

Section 1	-	General
Section II	-	Training, Qualification and Certification of NDE Personnel
Section IV	-	Examination Procedures, 100 Series (Radiographic Method) 200 Series (Penetrant Method) 300 Series (Magnetic Particle Method) 400 Series (Ultrasonic Method) 600 Series (Visual Method)

The following is a cross reference of the 10CFR50 Appendix B Criteria to the procedure covering the Criteria.

NRC Criteria	Site QA/QC Procedure Covering Quality Assurance Criteria
Criterion I	CQA General Section
Criterion II	CQA General Section, CQA-1
Criterion IV	CQA-24
Criterion VI	CQA-28

Criterion VII	CQC-6
Criterion VIII	CQC-7
Criterion IX	CQC-19, 20, NDE Procedure Manual
Criterion X	CQA-28, CQC-1, 6, 7, 10, 13, 15, 19, 20, NDE Procedure Manual
Criterion XI	CQA-28, CQC-13, 15, 19, 20, NDE Procedure Manual
Criterion XII	CQA-28, CQC-1
Criterion XIII	CQA-28, CQC-10
Criterion XIV	CQC-9, CQC-19
Criterion XV	CQC-2
Criterion XVI	CQC-2
Criterion XVII	CQA-4

4) Last paragraph, seventh and eighth lines from the bottom of page 1.8-1m of the PSAR should read ". . . the CP&L Manager Engineering Harris Plant Section and the Director-Quality Assurance/Quality Control - Harris Plant.

5) In the first and second paragraphs on page 1.8-1n of the PSAR the title of the CP&L Manager - Engineering & Construction Quality Assurance has been changed to the CP&L Manager - Quality Assurance/Quality Control - Harris Plant. The responsibilities outlined in the third paragraph on pages 1.8-1n to the Manager - Engineering & Construction Quality Assurance have been transferred to the CP&L Manager - QA Services Section. Also, reference to "Power Plant Engineering" in the second paragraph should be changed to "Harris Plant Engineering."

6) Paragraphs a, b, and c on page 1.8-2 of the PSAR should be replaced with the following:

   a) Quality Assurance and Inspection

      The component manufacturers and/or CP&L, as applicable is responsible for providing appropriate quality control procedures, systems, and inspection personnel for assuring and demonstrating that the end product has the specified degree of quality as defined in the appropriate specifications, drawings and/or purchase documents. The actual quality control effort will be executed by the equipment manufacturer. Quality Assurance/Quality Control activities are the responsibility of the CP&L Harris Plant Quality Assurance/Quality Control Section of the Corporate Quality Assurance Department. The inspection of construction activities is shared

between the Harris Plant Quality Assurance/Quality Control Section and the Harris Site Management Section. Carolina Power & Light Company's Corporate Quality Assurance Program reflects this sharing of responsibilities. The Harris project procedures delineate the activities and responsibilities for each section. At the present time, the following summarizes the QC inspection activities performed by the Harris Site Management Section.

a. Soils - all

b. Concrete - all, except production testing

c. Reinforcing Steel and Embedded Items Installation - all, except cadweld inspection

d. Structural Steel - all, except welding and NDE

e. Structural Steel - all, except welding and NDE

f. Electrical Items Installation - all

g. Instrumentation Installation - all

h. Protective Coatings - all

i. Lifting Equipment - all, except NDE

All other QC inspections of construction activities are the responsibility of the Harris Plant QA/QC section.

The Harris Plant QA/QC Section will be responsible for inspection of assembly/disassembly of ASME Section III Class 1, 2, and 3 pressure boundary items.

b) Quality Assurance Surveillance

The CP&L Quality Assurance Services Section and Ebasco Material Engineering and Quality Assurance Department personnel will have surveillance responsibility on the quality control systems, procedures, and efforts of component manufacturers and service contractors, in accordance with their respective endeavors. Surveillance of construction contractors will be the responsibility of the CP&L Harris Plant Quality Assurance/Quality Control Section.

Two major functions are accomplished by these personnel. The first is during the design phase where the various specifications and procurement documents are reviewed for proper inclusion of applicable code and quality control requirements. The second function occurs during the actual fabrication and construction operations. During this phase the component manufacturer's and construction quality control procedures and programs are reviewed as meeting the requirement of the specification and/or procurement documents, and a physical surveillance action is performed to ensure that the quality requirements are in fact being met.

The Harris Plant QA/QC Section is responsible for performing surveillance only in those areas where the section has no responsibility for the QC inspections. The QC inspections performed by the Harris Site Management Section are subject to surveillance by the Harris Plant QA/QC Section. This eliminates the dual QA/QC functions for a given activity being performed by any one QA supervisor.

c) Quality Assurance Audit

To ensure that the CP&L Quality Assurance Program is functioning as planned, periodic audits are performed by the CP&L Quality Assurance Services Section, Performance Evaluation Unit and/or its authorized consultants. The quality assurance activities of manufacturers and contractors are audited to ascertain if they are actually functioning as required.

It should be noted that the changes reflected in the above paragraphs a) and b) regarding the division of responsibility between the site QA/QC organization and the Harris Site Management was previously accepted by the NRC by letter to CP&L dated February 25, 1981.

7) References on page 1.8-3 and 1.8-4 of the PSAR for CP&L's Power Plant Engineering, Technical Services and Power Plant Construction Departments should be revised to reflect CP&L's Nuclear Plant Engineering, Corporate Quality Assurance and Nuclear Plant Construction Departments respectively. Also, the first sentence of paragraph 1.8.3.1.3 should be revised to read as follows, "The Manager - Corporate Quality Assurance has overall responsibility for quality Assurance activities during the engineering, design, procurement, construction, and testing phases as delegated through the Manager QA Services Section and the Manager - QA/QC - Harris Plant. Also, reference to the Engineering & Construction Quality Assurance Section on pages 1.8-3, 1.8-4, and 1.8-4a should read QA Services Section and the Harris Plant QA/QC Section.

8) The paragraph just above section 1.8.3.1.4 on page 1.8-4 of the PSAR should be revised as follows:

"The CP&L Site Quality Assurance/Quality Control personnel report directly to the Manager - Quality Assurance/Quality Control - Harris Plant. The Manager - QA/QC - Harris Plant is responsible for direction of Construction Quality Assurance/Quality Control through the CP&L Director Harris QA/QC Unit. The Director - Harris QA/QC will work closely with Ebasco regarding Ebasco purchased equipment. The Principal NDE Specialist at the Harris Site is responsible for providing the necessary NDE support and reports directly to the Manager - QA/QC - Harris Plant."

9) Reference to the System Planning and Coordination Department at the start of section 1.8.3.1.4 on page 1.8-4 of the PSAR should be deleted and the first four lines at the start of section 1.8.3.1.4 should read as follows: "The Principal QA Specialist of the

Performance Evaluation Unit which is part of the QA Services Section of the Corporate Quality Assurance Department is responsible for conducting quality assurance audits and is responsible for (1) establishing . . ."

10) Reference in the first paragraph of page 1.8-4a of the PSAR to the Company Chairman/Chief Executive Officer, Executive Vice-President and Chief Operating Officer should be changed to read "Company Chairman/President and Executive Vice President, Power Supply and Engineering and Construction." Also the last sentence in this paragraph should be revised to read "As shown by figure 1.8-1, the Performance Evaluation Unit of the QA Services Section is independent from the Departments responsible for the Engineering & Construction of the plant.

11) Reference in paragraph 1.8.3.2.5 on page 1.8-8 to the Ebasco Site Quality Assurance Coordinator should be deleted. These activities will be performed by off-site Ebasco QA personnel and on-site CP&L QA personnel.

12) Reference in the third paragraph on page 1.8-15a to the CP&L Site Manager should be changed to the CP&L Project General Manager - Harris Plant.

13) Page 1.8-20 of the PSAR should be revised as follows:

"1.8.3.4.1 Harris Plant Quality Assurance/Quality Control Section

The Manager - Quality Assurance/Quality Control - Harris Plant is responsible for:

1) Surveillance and direction of construction site QA program

2) Surveillance of site construction activities

3) Preparation and implementation of Quality Assurance/Quality Control procedures for Site QA/QC

4) Assuring all persons concerned that the site QA program is being performed as per the Corporate Quality Assurance Program and Quality Assurance Procedures

5) Providing inspectors and quality assurance services required by the site quality assurance program. As discussed in paragraph 1.8.2(a), the Harris Site Management Section is also responsible for providing construction inspection.

The Manager - Quality Assurance/Quality Control - Harris Plant will be responsible for staffing and directing the quality assurance/quality control functions at the site. He will be directly accountable to the CP&L Manager of the Corporate Quality Assurance Department in the implementation of this Quality Assurance Program.

The Harris Quality Assurance/Quality Control Unit reports to the Manager - Quality Assurance/Quality Control - Harris Plant. They will work closely with the Ebasco regarding Ebasco supplied equipment. The CP&L Director - Harris QA/QC Unit has authority to stop any phase of construction work where he finds quality or procedures are questionable. Deficiencies noted by the site Quality Assurance/Quality Control personnel are reported to the Manager - Quality Assurance/Quality Control - Harris Plant.

1.8.3.4.2 Field

The Harris Quality Assurance/Quality Control Unit is supervised by the Director - Harris QA/QC Unit, who reports directly to the Manager - Quality Assurance/Quality Control - Harris Plant. Administratively, he will report to the Project General Manager - Harris Plant at the site for scheduling, coordination and administrative services. Carolina Power & Light Company's Harris Plant Quality Assurance/Quality Control Section is responsible for surveillance of the construction quality assurance program.

Quality Assurance/Quality Control Inspectors shall be assigned to various phases of the project as directed by the Director - Harris QA/QC Unit.

Quality Assurance/Quality Control personnel will be qualified in accordance with the Harris Plant Quality Assurance/Quality Control procedure requirements.

The Director - Harris QA/QC Unit shall:

a) Work cooperatively with and set up definite lines of communication with the Westinghouse NSSS Site Representative and Ebasco for routine flow of information and for special problems."

14) Reference in paragraph f on page 1.8-21 to Engineering and Construction Quality Assurance Procedures should be changed to Harris Plant QA/QC Section procedures.

15) Paragraph g on page 1.8-21 should be revised to read "Any differences of opinion between the Director - Harris QA/QC Unit and the Project General Manager - Harris Plant shall be referred to the Vice President of Nuclear Plant Construction and the Manager - Harris Plant QA/QC Section."

16) All reference to CP&L's Manager - Engineering & Construction Quality Assurance on page 1.8-23a should be changed to indicate CP&L's Manager - QA Services Section and CP&L's Manager - Harris Plant QA/QC Section. Reference to CP&L Manager - Project Engineering in the second paragraph should be changed to CP&L's Manager - Engineering, Harris Plant. The first line in the third paragraph on this page should read "The Harris Plant Quality Assurance/Quality Control Section and the Harris Site Management will be responsible for . . ." The fifth paragraph on this page should read

"Ebasco/CP&L quality assurance representatives spot check quality assurance records of selected Westinghouse safety related components." The first line in the eighth paragraph on this page should read "CP&L also reviews the applicable portion of Ebasco's quality . . ."

17) Reference to CP&L's Engineering and Construction Quality Assurance Section in the sixth paragraph on page 1.8-23a should be changed to CP&L QA Services Section.

18) The first line in the third prargraph on page 1.8-23d should be revised to read "The Harris Plant Quality Assurance/Quality Control Section and Harris Site Management will prepare . . ."

19) All references to CP&L's Engineering & Construction Quality Assurance Section on pages 1.8-23h and 1.8-23i should be changed to CP&L's Harris Plant Quality Assurance/Quality Control Section.

20) The existing figures 1.8-1 and 1.8-2 should be replaced with the new attached figures. Also figure 1.8-4 should be deleted.

21) The existing Table 1.8-4 should be replaced with the new attached table.

Table 1.8-4

Carolina Power & Light Company

Quality Assurance/Quality Control Personnel

	Personnel Full-Time	Assigned* Part-Time	Qualifications	Functions
1. Harris Plant QA/QC Section				
a) Management	1		Formal Education and/or Experience	Manages the CP&L Harris Plant Quality Assurance/Quality Control Program
b) Engineering Unit				
1) Principal QA Engineer	1	1	Formal Education and/or Experience	Supervise QA Engineering Activites
2) Project QA Engineer	4	1	Formal Education and/or Experience	Coordinate Project QA Engineering Activities; Review Specifications, Procedures for QA Requirements
c) Harris QA/QC Unit				
1) Director Harris QA/QC	1		Formal Education and/or Experience	Supervise QA/QC Activities
2) QA/QC Superintendents	2		Formal Education and/or Experience	Supervise Construction/ Operations QA/QC Surveillance/ Inspection Activities
3) QA/QC Supervisors Specialists Inspectors/ Technicians	70		Formal Education and/or Experience	Perform QA/QC Inspections and Tests and Assist Other QA Personnel
d) NDE Unit				
1) Principal QA Specialist NDE		1	Formal Education and/or Experience	Supervise NDE Unit Activities

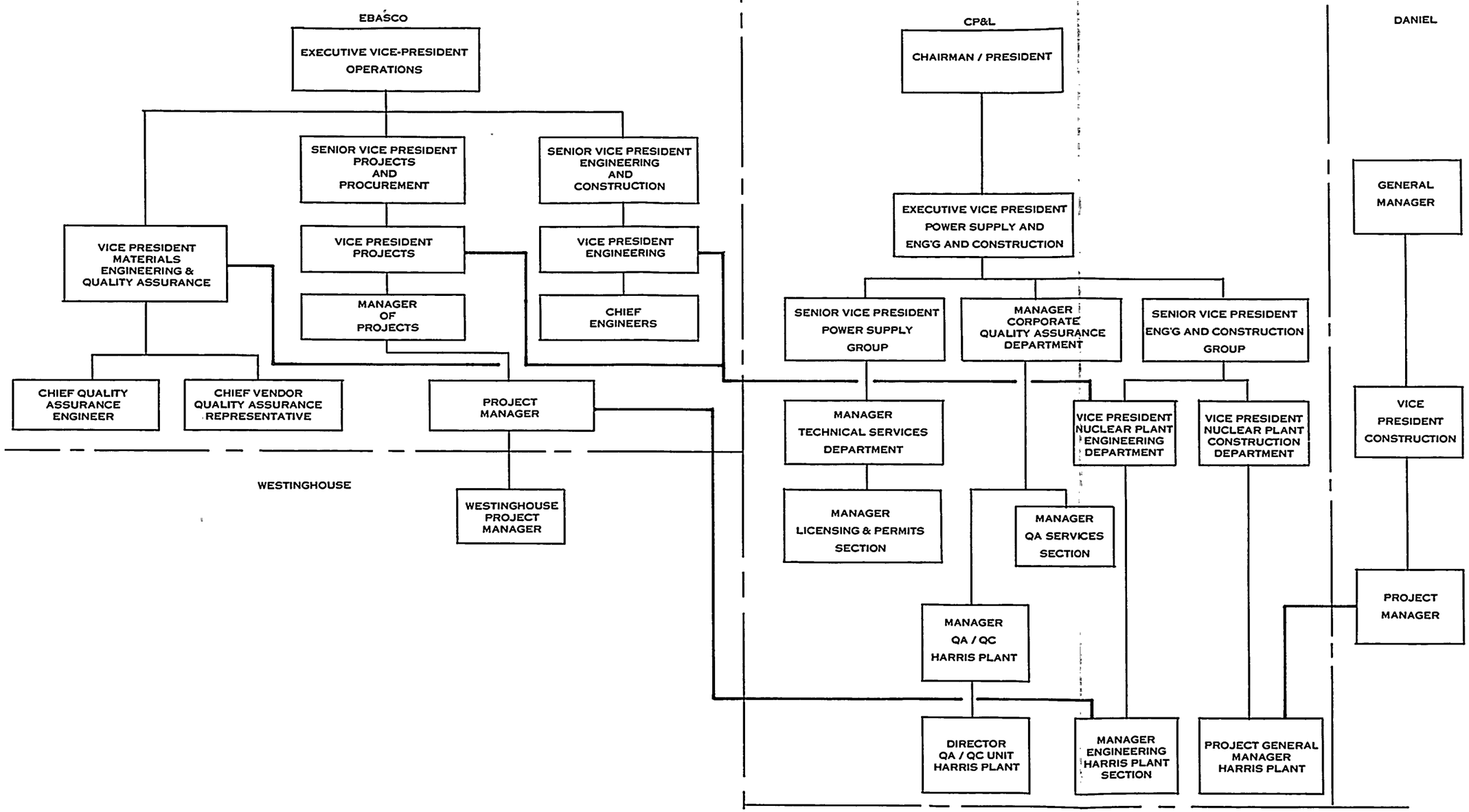
	Personnel Full-Time	Assigned* Part-Time	Qualifications	Functions
NDE Unit (Cont'd)				
2) Project QA Specialist NDE		1	Formal Education and/or Experience	Coordinate/Supervise NDE Support Activites for SHNPP and Other CP&L Facilities
3) QA Specialist NDE		1	Formal Education and/or Experience	Supervisor of NDE Technicians Performing SHNPP Construction Site NDE Activities
4) QA/QC Technicians		17	Formal Education and/or Experience	Perform NDE Activities
2. QA Services Section				
a) Management		1	Formal Education and/or Experience	Manages the CP&L QA Services Section
b) Engineering Unit				
1) Principal QA Engineer		1	Formal Education and/or Experience	Supervise Engineering QA Activities
2) Project QA Engineer	1		Formal Education and/or Experience	Coordinate Project Engineering QA Activities
3) Engineers		4	Formal Education and/or Experience	Perform Engineering Audits and Review Specifications for QA Requirements
c) Vendor Surveillance Unit				
1) Principal VS Specialist		1	Formal Education and/or Experience	Supervise Vendor Surveillance Activities
2) Project VS Specialist		1	Formal Education and/or Experience	Participate in and Review Vendor Surveillance Activities

	Personnel Full-Time	Assigned* Part-Time	Qualifications	Functions
Vendor Surveillance Unit (Cont'd)				
3) Specialists		5	Formal Education and/or Experience	Participate in and Review Vendor Surveillance Activities
d) Performance Evaluation Unit				
1) Principal QA Specialists		1	Formal Education and/or Experience	Supervise the CP&L Corporate Audit Program
2) Project QA Specialists		1	Formal Education and/or Experience	Coordinate Audit Activities
3) Specialists		4	Formal Education and/or Experience	Perform Audits in Accordance with approved procedures

* Additional personnel will be assigned as needed

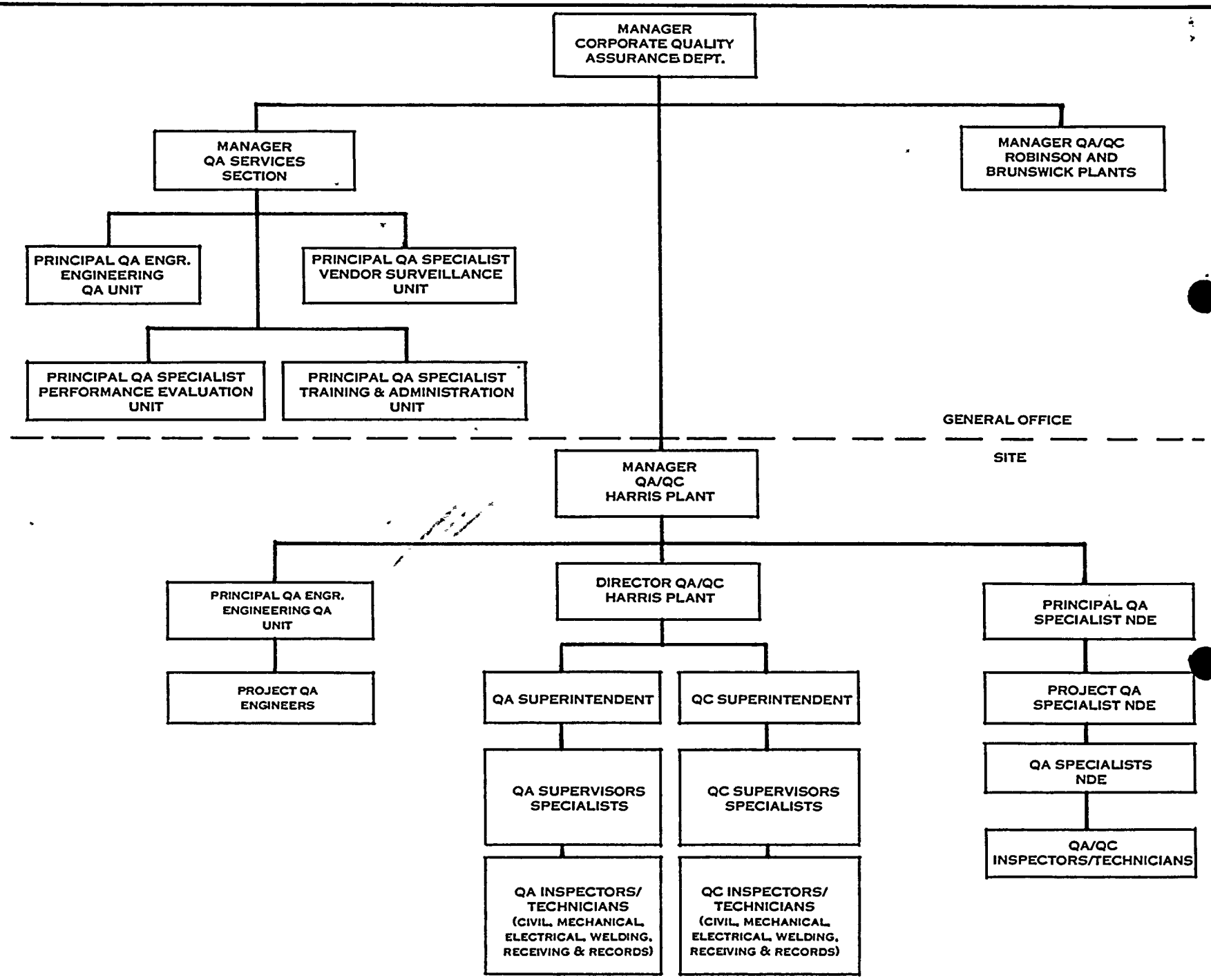
NOTE: All QA personnel are full-time QA personnel; however, the personnel indicated as part-time work on other power plant projects as well as SHNPP.

(6724JDKpgp)



CAROLINA POWER & LIGHT COMPANY
SHEARON HARRIS NUCLEAR PLANT
UNITS 1, 2, 3 & 4

QUALITY ASSURANCE ORGANIZATION



CAROLINA POWER & LIGHT CO.
SHEARON HARRIS NUCLEAR PLANT
UNITS 1 & 2

CORPORATE QUALITY ASSURANCE DEPARTMENT

FIGURE 1.8—2