Florida Power
CORPORATION

June 10, 1983
3F-0683-01

Mr. James P. O'Reilly
Regional Administrator, Region II
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 2900
Atlanta, GA 30303

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
Submittal of Quality Programs Description

Dear Mr. O'Reilly:

Florida Power Corporation (FPC) hereby submits, as Attachment A, the current description of its Quality Program for the operational phase of Crystal River Unit 3. This submittal is made in accordance with the requirements of 10 CFR 50.54(a)(2).

FPC considers the Quality Program for the operational phase, previously accepted by the NRC, to be that program described in Sections I.7.6.7 and I.7.7 of the Crystal River Unit 3 FSAR through Amendment 53, dated June 30, 1978. Changes made to that accepted Quality Program, since it was submitted to the NRC, are identified in Attachment A by a vertical line in the right hand margin. Attachment B presents the reasons and bases for those changes in accordance with 10 CFR 50.54(a)(3)(ii).

Our 1982 FSAR revision, per 10 CFR 50.71(e)(3)(i), reorganized the FSAR such that the Quality Program for the operational phase (previously described in FSAR Sections I.7.6.7 and I.7.7) is now described in Section I.7. Attachment A replaces Section I.7 of the current FSAR. The changes identified in Attachment A are annotated to correspond with justifications listed in Attachment B. An unannotated copy of Attachment A, subject to changes in accordance with 10CFR50.54(a), will be provided with our next annual revision of the FSAR.

FPC management and the Nuclear General Review Committee have reviewed the current description of the Quality Program and the bases for change included in that program. We conclude that the current Quality Program continues to satisfy the criteria of 10 CFR 50, Appendix B and the program description commitments previously accepted by the NRC.

Add W. Haas

DESIGNATED ORIGINAL

Certified By Earline Scott

Please contact us if you desire any additional information regarding our Quality Program description changes.

Sincerely,

G. R. Westafer

G. R. Westafer
Manager
Nuclear Licensing & Fuel Management

Attachment

ATTACHMENT A

1.7 Quality Program (Operational)

1.7.1 Introduction

Florida Power Corporation (FPC) has implemented a comprehensive Quality Program in order to maintain the high quality of plant systems and equipment during operation, maintenance, repair, modification, and refueling. Sections 1.7.1, 1.7.2 (and Table 1-3), 1.7.3 and 1.7.4 describe the FPC Quality Program during the operational phase. This program and its implementation are available for audit by NRC personnel.

1.7.1.1 Organization

FPC has established the functional responsibilities and authorities of positions/organizations involved in the Quality Program. The qualifications of the individuals responsible for directing and managing the Quality Program are described in FSAR Appendix 12A. In certain instances, duties and authority to execute and audit the quality activities are delegated to other organizations. In all cases, FPC retains responsibility for the Quality Program for Crystal River Unit 3.

Verification of conformance to established quality requirements on safety-related structures, systems, and components is accomplished by those individuals or groups who do not have direct responsibility for performing the work being verified.

Persons and organizations performing quality assurance functions have sufficient authority and organizational freedom to identify quality problems; initiate necessary action to provide for resolution of nonconformances through designated channels; verify implementation of solutions; and, control further processing, delivery, or installation of a nonconforming item until the proper disposition of the deficiency or the unsatisfactory condition has been approved.

The following summarizes the functional responsibilities and authorities of positions/organizations involved in directing and managing the FPC Quality Program:

1. President

   Ultimate responsibility for the overall effectiveness of FPC's Quality Program rests with its President. He has assigned the responsibility for the implementation of the program to the Executive Vice President.

2. Executive Vice President

   The Executive Vice President is responsible for the implementation of the Quality Program. He has the authority and responsibility to resolve all problems related to the Quality Program when resolution cannot be obtained at subordinate levels of management. He has delegated the

authority for administering the program to the Vice President, Engineering Services. 6

3. Vice President, Engineering Services

The Vice President, Engineering Services has the authority and responsibility to administer the FPC Quality Program. He reviews and approves all program policies. This position provides an effective communications channel with all other FPC senior management.

4. Director, Quality Programs

The Director, Quality Programs, reporting to the Vice President, Engineering Services, has the responsibility to assure that the requirements of the Quality Program are implemented. He has the authority and organizational freedom to identify quality problems; to initiate, recommend or provide possible solutions; and to verify the implementation of solutions. He has the authority, which may be delegated to others, to hold up work that is nonconforming. The Director, Quality Programs, has the authority to take decisions regarding work that is nonconforming directly to other levels of FPC management. He is independent of groups or functions directly responsible for performing specific work activities affecting quality.

5. Vice President, Nuclear Operations

The Vice President, Nuclear Operations, reporting to the Executive Vice President is responsible for operations, engineering and quality control functions at Crystal River Unit 3. He concurs with Quality Program policies prior to their approval.

6. Director, Fuel & Special Projects

The Director, Fuel & Special Projects, is responsible for administering fuel fabrication contracts and for coordinating the fabrication and delivery schedules for reload fuel with FPC's fuel fabricator, Nuclear Operations, and Quality Programs Department, as applicable.

7. Nuclear General Review Committee

The Nuclear General Review Committee, reporting to the Executive Vice President, is responsible for performing the independent review of and maintaining a cognizance over the audit functions as required by Technical Specifications. The composition, functional responsibilities, and authority of the Nuclear General Review Committee are in accordance with the requirements of the Technical Specifications.

8. Plant Review Committee

The Plant Review Committee provides advice to the Nuclear Plant Manager on matters related to nuclear safety. The composition, functional responsibilities, and authority of the Plant Review Committee are described in the Technical Specifications.

1.7.1.2 Quality Program

This section (and the remainder of Section 1.7) describes the FPC Quality Program for Crystal River Unit 3 during the operational phase. The operational phase began with the commencement of fuel loading and ends with plant decommissioning.

The Quality Program complies with the requirements of 10 CFR 50, Appendix B. This program requires that all persons performing quality activities associated with the operation of Crystal River Unit 3 comply with the program. FPC conducts or delegates the responsibility to conduct audits of the program activities.

FPC has an indoctrination and training program for the personnel performing quality activities to assure that they are knowledgeable of the Quality Program's procedures and requirements. The indoctrination and training program includes appropriate procedures and personnel records. Personnel responsible for performing quality activities are instructed as to the purpose, scope and implementation of the quality-related manuals, instructions, and procedures. Personnel performing quality activities are trained and qualified in the activity being performed.

Quality activities such as inspection and test are done with appropriate equipment and under suitable conditions. Housekeeping and cleanliness controls are implemented through procedures. These controls meet the requirements of ANSI N18.7, Section 5.2.10, ANSI N45.2.1 and ANSI N45.2.3 as each is defined in Table 1-3.

Quality control as defined in Section 1.7.4 is the responsibility of the department which performs the actual work; however, the quality control activities within a department are performed by individuals other than those who perform the work. These activities are performed in accordance with approved written procedures or instructions documented in the respective departmental procedures manual. These departmental procedures delineate the position(s)/organization(s) responsible for quality control activities.

The FPC Quality Program applies to structures, systems and components as defined in FSAR Section 1.6.4, equipment in the FPC "Safety Listing" and may be applied to other equipment and activities at FPC management discretion.

FPC regularly reviews the status and adequacy of its Quality Program through periodic Corporate audits of the Quality Program at least once every two years. In addition responsible management reviews audit reports and corrective actions of that part of the Quality Program that they are implementing.

Changes to the Quality Program which result in more stringent requirements will be entered in appropriate implementing procedures within 90 days of the Quality Program change unless otherwise specified in the commitment/requirement to change the Quality Program or unless a longer period is evaluated and accepted by the Director, Quality Programs. All other Quality Program changes will be reflected in appropriate implementing procedures at their next revision.

The FPC Quality Program meets the requirements of the Regulatory Guides and ANSI Standards as defined in Section 1.7.2 (and Table 1-3). | 15 Table

1.7.1.3 Design Control |

FPC's Nuclear Engineering Department provides for an independent review of safety-related modifications which involve development of, or changes to, design data or documentation. This review assures that the design activities associated with modifications are in accordance with ANSI N45.2.11 as defined in Table 1-3. | 16 Table Audit

Maintenance or modifications which may affect safety-related structures, systems, or components are performed in a manner that ensures quality requirements, material specifications, and inspection requirements are met. Maintenance or modifications of safety-related equipment are planned and performed in accordance with written procedures, documented instructions, or drawings appropriate to the circumstances which conform to applicable codes, standards, specifications, and criteria. | 17

1.7.1.4 Procurement Document Control |

Procurement documents are reviewed by qualified personnel, prior to purchase, to assure that quality requirements have been specified. Individuals reviewing these procurement documents are not involved with the other phases of the procurement activity. These reviews are performed and documented in accordance with approved written procedures. | 18

FPC's Quality Program contains provisions which require that: |

1. Procedures are established which clearly delineate the sequence of actions to be accomplished in the preparation, review, approval and control of procurement documents and which identify those positions or groups responsible for performing those functions. |

2. Review of and concurrence with the procurement documents are performed by qualified individuals knowledgeable of the Quality Program to assure that the quality requirements are stated. This review is to determine that quality requirements can be inspected and controlled, that there is adequate acceptance or rejection criteria, and that the procurement document has been prepared in accordance with FPC Quality Program procedure requirements. | |

3. Documented evidence of the review and approval of procurement documents is provided and available for verification. |

4. Procurement documents identify those 10 CFR 50 Appendix B requirements that must be complied with by the supplier's quality program. | 19

5. Procurement documents contain or reference, as applicable, basic technical requirements such as regulatory requirements and design bases and | 20

identify the documentation to be prepared, maintained, submitted, and made available to FPC for review and/or approval. 20

6. Procurement documents contain the requirements for the retention, control, and maintenance of records as appropriate.

7. Procurement documents contain the right of access to vendor's facilities and records for source inspection and audit by FPC.

8. Changes and/or revisions to a procurement document are subject to review and approval requirements at least equivalent to those for the original document. 21

1.7.1.5 Instructions, Procedures and Drawings

FPC's Quality Program contains requirements to assure that each of the 18 criteria within 10 CFR 50, Appendix B are delineated, accomplished, and controlled in accordance with approved written procedures. 22 Audit

FPC's Quality Program contains provisions which require that instructions, procedures, or drawings include appropriate quantitative (such as dimensions, tolerances, and operating limits) or qualitative (such as workmanship samples) acceptance criteria for determining that important quality activities have been satisfactorily accomplished.

Written procedures are adhered to in matters relating to nuclear safety. Written procedures are present and followed step-by-step for complex or infrequently performed tasks. Such tasks are identified. In order to properly document that procedural steps are verified as required, a checkoff list system has been developed. Each step of the procedure requiring verification is included on the checkoff list. 23 24

1.7.1.6 Document Control

FPC has a document control system for documents which prescribe activities affecting quality. 25 Audit

FPC's Quality Program contains provisions which require that:

1. Measures are 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 are reviewed and approved by the same organizations that performed the original review and approval unless delegated by the appropriate FPC organization to another qualified responsible organization.

3. The reviewing organization(s) has access to pertinent background information upon which to base its approval and has an adequate understanding of the requirements and intent of the original document.

4. Approved changes are promptly included with instructions, procedures, drawings, and other appropriate documents.

5. Obsolete or superseded documents are controlled to prevent their inadvertent use.

6. Documents are available at the start of the work for which they are needed.

7. A method for identifying the current revision of instructions, procedures, and drawings is established and implemented. This information is updated and distributed as necessary to predetermined responsible personnel. 26

As a minimum under this criteria, the controlled documents include:

1. Design specifications.

2. Design, manufacturing, construction, and installation drawings.

3. Quality Program manual and operating procedures.

4. Manufacturer inspection and testing instructions.

5. Procurement documents.

6. Maintenance, repair, and modification instructions.

7. Test surveillance instructions.

8. Refueling instructions.

9. In-service inspection instructions.

10. Other procedures per Regulatory Guide 1.33, as defined in Table I-3 and the Technical Specifications. 27 Table

1.7.1.7 Control of Purchased Material, Equipment and Services

Vendor evaluation surveys to qualify potential suppliers in accordance with FPC approved written procedures and in compliance with ANSI N18.7, Section 5.2.13 and ANSI N45.2.13 as each is defined in Table I-3, are conducted by FPC or through qualified contractors. Suppliers' quality programs are reviewed and concurred with prior to implementation of activities. 28 Table Audit

FPC assures that quality requirements of the purchase document have been met, using source inspection, receipt inspection or document review, as appropriate. 29

1.7.1.8 Identification and Control of Materials, Parts and Components

FPC has established measures for the identification and control of materials, parts, and components. 30 Audit

FPC's Quality Program contains provisions which require that:

1. Procedures are established which describe identification and control of material, parts, and components, including partially fabricated assemblies. 31

2. Identification requirements are determined during the initial planning stages (i.e., during generation of specification and design drawings).

3. Identification is specified to the extent that the item identified 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. The degree of identification is specified on the design drawing or in referenced technical documents.

5. Measures are provided to assure that the location and method of identification do not affect the function or quality of the item being identified.

6. Measures are provided for the verification of correct identification of materials, parts, and components prior to release for manufacturing, shipping, construction and installation.

1.7.1.9 Control of Special Processes

Participating organizations provide written procedures for performance of special processes such as welding, heat treating, chemical cleaning, and non-destructive testing and include the requirements for qualification of personnel performing the work. 32 Audit

FPC's Quality Program contains provisions which require that:

1. Measures are established to assure adequate performance and control of special processes such as welding, heat treating, chemical cleaning and non-destructive testing.

2. Measure are established to assure that procedures, equipment and personnel connected with special processes are qualified in accordance with the requirements of applicable codes, standards, and specifications.

3. Measures are established to assure that special processes are performed by qualified personnel in accordance with approved written procedures. These procedures provide for recording evidence of verification and, if applicable, inspection and process results. 33

4. An active file is maintained current on qualification records of all special process procedures, equipment, and personnel performing special processes.

5. Special process procedures and the credentials of qualified personnel are regularly reviewed to assure they are of the latest revision and that personnel qualifications have not expired.

1.7.1.10 Inspections

Written procedures are required for the performance of in-process inspection. Inspection personnel are qualified in compliance with the Crystal River Unit No. 3 Technical Specifications, as applicable, or Regulatory Guides 1.8, 1.58, and 1.146 as each Regulatory Guide is defined in Table 1-3. 34 Audit Table

FPC's Quality Program contains provisions which require that:

1. Inspection personnel are independent from the individual or group physically performing the activity being inspected.

2. Inspection procedures, instructions and/or checklists are provided which document 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 are available for use prior to performing the inspection operation.

4. Measures are provided for qualifying the inspectors and maintaining the current status of each inspector's qualifications.

5. Measures are established to assure that inspection equipment is within calibration prior to performing an inspection operation.

6. Measures are provided for monitoring processing methods, equipment, and personnel if inspection of processed material is impossible or disadvantageous. Inspection and process monitoring are provided when control is inadequate without both. 35

7. Specific hold points are indicated in appropriate documents for mandatory witnessing or inspection beyond which work shall not proceed without the consent of FPC's designated representative.

1.7.1.11 Test Control

Required tests are performed in accordance with approved written procedures to assure compliance with design documents. Testing activities are conducted during the operational phase to verify the compliance of components to design requirements. Audit

FPC's Quality Program contains provisions which require that:

1. A test program is established to assure that all testing required to demonstrate that the item will perform satisfactorily in service is identified, documented, and accomplished in accordance with approved written procedures.

2. The test program covers the required tests, including, where appropriate, prototype qualification tests, proof tests prior to installation, preoperational tests, and operational tests. 36

3. Written test procedures are prepared which incorporate or reference the requirements and acceptance limits contained in applicable design and procurement documents.

4. The written test procedures include, as appropriate, instructions for test method and identification of test prerequisites such as:

   a) calibrated instrumentation;

   b) adequate and appropriate equipment;

   c) trained, qualified, licensed and/or certified personnel;

   d) preparation, condition, and completeness of item to be tested; and

   e) suitable and controlled environmental conditions.

5. Test results are documented and evaluated to assure that test requirements have been satisfied. 37

1.7.1.12 Control of Measurement and Test Equipment

FPC has established and implemented appropriate test and calibration procedures for test devices used to verify the acceptability of items within the Quality Program. Calibration records and controls are provided for measurement and test equipment in accordance with the requirements of the Technical Specifications and ANSI N18.7, Section 5.2.16, ANSI N45.2.4 and ANSI N45.2.8 as each ANSI Standard is defined in Table 1-3. 38 Audit Table

FPC's Quality Program contains provisions which require that:

1. Procedures are established which describe the calibration technique, calibration frequency, maintenance and control of measuring and test instruments, tools, gauges, fixtures, reference standards, transfer standards, and non-destructive test equipment to be used in the measurement, inspection, and monitoring of safety-related components, systems, and structures.

2. Measurement and test equipment is uniquely identified and has traceability to the calibration test data.

3. Measurement and test instruments are calibrated and maintained at specified intervals, based on the required accuracy, purpose, the degree of usage, stability characteristics, and other conditions affecting the measurement.

4. Measurement and test equipment is calibrated on or before the designated due date or before use. | 39

5. When measurement and test equipment is found to be out of calibration, an investigation is conducted and documented to determine the validity of previous inspections performed and the acceptability of those items previously inspected.

6. Calibrating instruments have known valid relationships to a nationally recognized standard. If no national standard exists, the basis for calibration is documented. | 40

7. Facilities used for calibrating sensitive or close tolerance measurement and test equipment provide an environment that is sufficiently controlled to allow the measuring device to be evaluated and calibrated to its required accuracy.

1.7.1.13 Handling, Storage and Shipping

FPC's Nuclear Materials Department is responsible for material handling, storage, and shipping activities for plant spare parts and operating supplies in accordance with approved written procedures. These procedures meet the requirements of ANSI N18.7, Section 5.2.13.4 and ANSI N45.2.2 as they are defined in Table 1-3. | 41 Audit Table

1.7.1.14 Inspection, Tests and Operating Status

FPC has approved written procedures to assure the proper marking of equipment denoting its status. | Audit

FPC's Quality Program contains provisions which require that:

1. Measures are established and documented to identify the inspection, test, and operation status of structures, systems, and components, which provide means for assuring that required inspections and tests performed are known throughout manufacturing, installation, and operation.

2. Measures are established to control the use of inspection and status indicators, including the authority for application and removal of tags, markings, and labels.

3. Measures to preclude bypassing of required inspections, tests, and other critical operations are provided through approved written procedures.

4. The status of nonconforming, inoperative, or malfunctioning structures, systems, or components is clearly identified to prevent inadvertent use.

1.7.1.15 Nonconforming Material, Parts, or Components

FPC has written requirements to be followed by persons performing quality activities, including contractors, to identify, document, segregate, disposition and report to FPC, any nonconformance, deviation or other condition adversely affecting quality. Audit

FPC's Quality Program contains provisions which require that:

1. Measures and procedures are established to control the identification, documentation, segregation, review, disposition, and notification of the affected organization of nonconformances.

2. Documentation is 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 are established and documented defining the responsibility and authority for determining the disposition of nonconforming items and approving the disposition.

4. Nonconforming items are segregated from other acceptable items (where feasible) and uniquely identified as nonconforming until properly dispositioned for use.

5. Acceptability of "rework" or "repair" of materials, parts, components, systems, and structures are verified by reinspection and/or testing of the item in accordance with approved written procedures. 42

6. Nonconforming items which are dispositioned "use as is" or "repair" are formally controlled through approved procedures or design changes.

7. Nonconformance reports are made part of the quality assurance records.

1.7.1.16 Corrective Action

FPC has approved written procedures to be followed by persons performing quality activities, including contractors, to assure that corrective action is taken to preclude the recurrence of nonconformances, deviations or other discrepancies adversely affecting quality. Audit

FPC's Quality Program contains provisions which require that:

1. Conditions adverse to quality, such as failures, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected. | 43

2. Evaluation of nonconformance and determination of the need for corrective action are in accordance with approved written procedures.

3. Measures are established to determine the cause of the nonconformance and institute corrective action to preclude the recurrence of those significant conditions adverse to quality.

4. Measures are established to follow up on corrective actions to assure proper implementation and close out of the corrective action documentation.

5. Measures are established to document and report to appropriate levels of management significant conditions adverse to quality, cause of the conditions, and corrective action taken.

1.7.1.17 Quality Assurance Records

FPC has established and implemented a system for the collection, storage, and maintenance of quality assurance records as required by the design documents, procurement documents, and Regulatory Guide 1.88 as defined in Table 1-3. Records transmitted to the quality files are done so in accordance with approved written procedures. | Audit Table

FPC's Quality Program contains provisions which require that:

1. Quality assurance records are of two categories, lifetime and nonpermanent. (Nonpermanent records are required to show evidence that an activity was performed in accordance with applicable requirements but need not be retained for the life of the item. Lifetime records are required to be maintained for the life of the particular item while it is installed in the plant or stored for future use.)

2. Quality assurance records are those records that furnish documentary evidence of the quality of items and of activities affecting quality. (A document is considered a quality assurance record when the document has been completed.)

   These records include the results of reviews, inspections, tests, audits, monitoring of work performance and material analysis, the qualification of personnel, procedures, and equipment, training records, design drawings and subsequent modifications, specification reports, procurement documents, calibration procedures and reports, nonconformance and corrective action reports, and other records required by Technical Specifications. The records are identifiable and retrievable per ANSI N45.2.9 as defined in Table 1-3. | 44 | 45 Table

3. The inspection and test records contain the following:

   a) Description of the types of operation.

   b) Evidence of completing and/or verifying a manufacturing inspection or test operation.

4. Records are stamped, dated, initialed, signed, or otherwise authenticated by authorized personnel.

5. Storage facilities are constructed, located, and secured to prevent destruction and minimize deterioration or loss of records. FPC maintains quality assurance records either in a vault for single copy records or as duplicate records in remote locations. 46

1.7.1.18 Audits

FPC and its contractors use approved written procedures for planned audits of FPC's quality activities.

These audits include provisions for obtaining resolution of all deviations from written procedures used to perform the activities being audited. Audit procedures also include provisions for the dissemination of audit results to proper management levels for resolution of nonconformances and evaluation of the status of the Quality Program. The results of all audits performed under this program are made available to FPC for review and evaluation. FPC's Quality Programs Department will perform audits to assess the effectiveness of the FPC Quality Program as contained in this document. The results of these audits are reported to FPC management. The Quality Programs Department maintains records of audit results. 47

FPC's Quality Program contains provisions which require that:

1. A comprehensive system of planned and documented audits is used to verify compliance with all aspects of the Quality Program.

2. Audits are performed in accordance with approved written procedures or checklists and are conducted by appropriately trained personnel not having direct responsibilities in the areas being audited.

3. Audit results are documented and reviewed by management having responsibility in the area audited.

4. Deficient areas are reaudited when required based on the severity of discrepancies, extent of corrective action required and significance to safety, performance, and reliability. 48

5. Audits include an objective evaluation of quality-related practices, procedures, and instructions; the effectiveness of implementation; and the conformance with policy directives.

6. Audits include the evaluation of work areas, activities, processes, items, and the review of documents and records.

7. The following types of audits are performed:

   a) Internal audits which provide a comprehensive independent verification and evaluation of quality procedures and activities to assure that they are meaningful and are effectively complying with the Quality Program requirements.

   b) External audits of contractors, subcontractors, and vendors performing activities under the Quality Program. These audits include verification and evaluation of their quality progam, procedures, and activities to assure that they are meaningful and are effectively complying with all aspects of the quality program and procurement requirements.

8. Audits are regularly scheduled consistent with Technical Specification requirements. | 49

9. Audit personnel qualifications meet the requirements of Regulatory Guide 1.146, as defined in Table 1-3. | 50 Table

1.7.2 Program Commitment

FPC is committed to comply with the requirements of those ANSI Standards and Regulatory Guides listed in Table 1-3 as defined in that Table, except for those alternative controls identified in the program description which fulfill the requirements but which differ slightly in specific implementation. When Regulatory Guides or ANSI Standards are superceded by an approved revision, that revision will not be implemented unless the docket is modified accordingly. | Table | 51

1.7.3 Quality Assurance Staff

Persons performing quality assurance functions, as defined in 10 CFR 50 Appendix B, conduct reviews and audits of FPC departments, suppliers and contractors that perform safety-related functions in connection with the operation, refueling, testing, maintenance and modification of Crystal River Unit 3. These reviews and audits are performed in accordance with approved written procedures and in compliance with approved minimum requirements for audit frequency. Persons performing quality assurance functions are authorized to identify quality problems and may recommend to FPC management that work be stopped under totally unacceptable conditions. Such persons have the organizational freedom to effectively perform the quality assurance functions. | 52 | 53

1.7.4 Glossary of Terms

Terms used in the FPC Quality Program are defined below or in those Regulatory Guides and ANSI Standards committed to by FPC, as defined in Table I-3.

1. Quality Activity

   The term "quality activity" is a general term used to describe activities within the total Quality Program. The purpose of using the term "quality activity" is to reserve the words "control" and "assurance" for those specific functions of the Quality Program defined as "quality control" and "quality assurance".

2. Quality Control

   Quality control is the first level and the most detailed function of the Quality Program. Quality control activities deal with the physical characteristics of materials, components, or systems. Quality control is a means of preplanned inspection, testing, and documentation per approved written procedures or standard practices. These procedures and practices assure conformance to specifications, drawings, codes, criteria, standards, FSAR, and Technical Specifications.

54
Table

Table I-3

55

Florida Power Corporation Quality Program Commitments

This table presents the Regulatory Guides and ANSI Standards endorsed by FPC as part of its Quality Program.

In each of the ANSI Standards, other documents (i.e. other Standards, codes, regulations, tables or appendices) required to be included as part of the Standard are either referenced or described in a special section of the Standard. The specific applicability or acceptability of these referenced Standards, codes, regulations, tables or appendices is either covered in other specific areas in the FPC Quality Program (OQAP) description, including this Table, or such documents are not considered as OQAP requirements, although they may be used as guidance.

When Sections of Standards are referenced within a clarification, it is understood that FPC shall comply with the referenced Sections as clarified.

Contents

NRC Regulatory Guide 1.8 - "Personnel Selection and Training" (Proposed Revision 2, 2/79) - Endorses ANSI/ANS-3.1 - 1978

55

The Quality Program complies with those portions of Sections 1, 2, 3.1, 3.2, 3.2.1, 3.2.2, 3.2.3, 3.3, 4.1, 4.4.5, 4.7.2, 5.1, 5.3, 5.3.1, 5.3.2, 5.3.3, and 5.6 of ANSI/ANS 3.1 - 1978 that are applicable to the Quality Assurance organization (both on-site and off-site) with the following clarifications:

A 1) Unless specifically addressed in other Sections of the FSAR, the Technical Specifications of Crystal River Unit 3, or other commitments made by or for FPC management, this Guide/Standard is not applicable to other personnel in the FPC organization.

A 2) With regard to Section 2 of ANSI/ANS 3.1 - 1978 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

E 3) With regard to Section 4.4.5 of ANSI/ANS 3.1 - 1978 titled Quality Assurance: FPC's commitment to this Section is made with the caveat that EITHER the Director, Quality Programs OR the onsite QA supervisor may meet the specified experience requirements.

A 4) With regard to Section 5.6 of ANSI/ANS 3.1 - 1978 titled Documentation: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.2 of the OQAP and ANSI N45.2.9 as specified in Table 1-3.

NRC Regulatory Guide 1.30 - "Quality Assurance Requirements for the Installation, Inspection and Testing of Instrumentation and Electric Equipment" (8/72) - Endorses ANSI N45.2.4 - 1972.

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

G,N-7 1) For operational phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, FPC shall either control these activities under this OQAP or under an NRC accepted Construction QA Program. When this OQAP is used, FPC shall comply with the requirements of the Regulatory Position documented in this Guide in that QA programmatic/administrative requirements included therein (subject to the clarifications below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).

The Scope of this Standard (Section 1.1) and the method of identifying calibration status (third sentence in Section 2.5.2) are defined in items 2 and 3 below based on two classes of instruments.

B,S-3 2) Portable items of measuring and test equipment (M&TE) and reference standards shall be tagged or labeled indicating the date of calibration and/or the due date of recalibration as well as the identity of person performing calibration. These items are in a calibration program which requires recalibration on a specified frequency or, in certain cases, prior to use.

B,S-3 3) Instrumentation and electrical equipment in the categories of (1) instruments installed as listed in the Technical Specifications, (2) installed instrumentation used to verify Technical Specification parameters, and (3) installed safety-related instruments and electrical equipment that provide an active function during operation or shutdown; (i.e. vice being designated safety-related solely because the instrument is an integral part of a pressure retaining boundary) shall be in a calibration program. This program provides, by the use of status cards, computer schedules, or tags, for the date that recalibration is due and indicates the status of calibration. The identity of person(s) performing calibration is provided on the calibration documents.

A 4) With regard to Section 1.4 of ANSI N45.2.4 - 1971 titled Definition: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

D 5) With regard to Section 2.1 of ANSI N45.2.4 - 1971 titled Planning: Planning requirements, when necessary, shall be incorporated into maintenance and modification procedures.

55

A 6) With regard to Section 2.3 of ANSI N45.2.4 - 1971 titled Procedures and Instructions: Procedures and instructions shall be implemented as set forth in Sections 1.7.1.5, 10 and 11 of the OQAP and by compliance with the Crystal River Unit 3 Technical Specifications and ANSI N18.7 as set forth in Table 1-3 to that Program in lieu of the requirements set forth here.

A 7) With regard to Section 2.4 of ANSI N45.2.4 - 1971 titled Results: These requirements are met by implementing Sections 1.7.1.10, 11 and 17 of the OQAP and by compliance with ANSI N18.7 as set forth in Table 1-3 of that Program in lieu of the requirements set forth here.

A,B,D,F 8) With regard to Section 3 of ANSI N45.2.4 - 1971 titled Preconstruction Verification: These requirements shall be implemented as follows: (1) They are required only for major modifications. (2) They shall be implemented with the clarification that "approved instruction manuals" shall be interpreted to mean the manuals provided by the supplier as required by the procurement order - these manuals are not necessarily reviewed and approved, per se, by FPC.* (3) No special checks are required to be made by the person withdrawing a replacement part from the warehouse -equivalent controls are assured by compliance with ANSI N45.2.2 as set forth in Table 1-3 of the OQAP. (4) They shall be complied with as stated, by individual technicians as part of the maintenance/modification process.

*See FPC's commitment to ANSI N18.7 in this Table for a description of how vendor manuals may be included in procedures.

C,D 9) With regard to Section 4 of ANSI N45.2.4 - 1971 titled Installation: These requirements shall be implemented by inclusion, as necessary in the appropriate maintenance or modification procedure, where such procedures are used. Standard FPC maintenance practices require that care be exercised in the six areas listed whether a procedure is required or not.

A,S-3 10) With regard to Section 5.1 of ANSI N45.2.4 - 1971 titled Inspections: The requirements of Section 5.1, including Subsections 5.1.1, 5.1.2 and the first sentence of 5.1.3, shall be implemented as set forth in Section 1.7.1.10 of the OQAP. The inspection program shall incorporate, as applicable, those items listed in these Subsections. The remaining sentence in 5.1.3 is covered in equivalent detail in FPC's commitment to ANSI N18.7, Section 5.2.6: The requirements as set forth in that commitment shall be implemented in lieu of the requirements stated here.

A,C,S-3 11) With regard to Section 5.2 of ANSI N45.2.4 - 1971 titled Tests: The requirements of Section 5.2, including Subsections 5.2.1 through 5.2.3, shall be implemented as set forth in Sections 1.7.1.3 and 11 of the OQAP. The test program shall consider the elements outlined in this Section, where applicable, when developing test requirements for inclusion in maintenance and modification procedures. In some cases, testing requirements may be met by post-installation surveillance testing in lieu of a special post-installation test.

55

A,H,S-3 12) With regard to Section 6 of ANSI N45.2.4 - 1971 titled Post-Construction Verification: This activity is not generally considered applicable at operating facilities because of the scope of the work and the relatively short interval between installation and operation. Where considered applicable, the elements described in this Section shall be considered in the development and implementation of inspection and testing programs as described in Sections 1.7.1.3, 10 and 11 of the OQAP.

F 13) With regard to Section 6.2.1 of ANSI N45.2.4 - 1972 titled Equipment Tests: The last paragraph of this Section deals with tagging and labeling. FPC shall comply with an alternate last paragraph which reads: "Each safety-related item of process instrumentation is identified with a unique number. This number is utilized in instrument maintenance records so that current calibration status, including data such as the date of calibration and identity of person that performed the calibration, can be readily determined. Such information may also be contained on tags or labels which may be attached to installed instrumentation."

F 14) With regard to Section 7 of ANSI N45.2.4 - 1971 titled Data Analysis and Evaluation: These requirements shall be implemented as stated herein after adding the clarifying phrase "Where used" at the beginning of the paragraph.

A 15) With regard to Section 8 of the ANSI N45.2.4 - 1972 titled Records: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI N45.2.9 as specified in Table 1-3.

NRC Regulatory Guide 1.33 - "Quality Assurance Requirements (Operation)" (Rev. 2, 2/78) - Endorses ANSI N18.7 - 1976/ANS - 3.2 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

A 1) Paragraph C.3 of Regulatory Guide 1.33 (and Section 4.3.4 of ANSI N18.7 which it references) shall be implemented as required by the Crystal River Unit 3 Technical Specifications which define "Subjects Requiring Independent Review."

A 2) Paragraph C.4 and subsections a through c of Regulatory Guide 1.33 (and Section 4.5 of ANSI N18.7 which they reference) shall be implemented as required by the Crystal River Unit 3 Technical Specifications which define the "Audit Program" to be conducted. The audit program is further defined and shall be implemented as required by the commitment to ANSI N45.2.12 as stated in Table 1-3 of the OQAP.

A,D 3) Paragraph C.5.a of Regulatory Guide 1.33 (and the second paragraph of Section 4.4 of ANSI N18.7 which it references) shall be implemented by meeting the requirements of the Technical Specifications for the Plant Review Committee (PRC).

C 4) Paragraph C.5.d of Regulatory Guide 1.33 (and Section 5.2.7.1 of ANSI N18.7 which it references) shall be implemented by adding the clarifying phrase "Where applicable" in front of the fourth sentence of the fifth paragraph. The Regulatory Guide's changing of the two uses of the word "should" in this sentence to "shall" unnecessarily restricts FPC's options on repair or replacement parts. It is not always practicable to test parts prior to use. For modifications where these requirements are not considered practicable, a review in accordance with the provisions of 10 CFR 50.59 shall be conducted and documented.

A 5) Paragraph C.5.e of Regulatory Guide 1.33 (and Section 5.2.13.4 of ANSI N18.7 which it references) shall be implemented subject to the same clarifications made for ANSI N45.2.2 elsewhere in Table 1-3 of the OQAP.

F 6) Paragraph C.5.f of Regulatory Guide 1.33 (and Section 5.2.19(2) of ANSI N18.7 which it references) shall be implemented with the substitution of the word "practical" for the word "possible" in the last sentence.

C,E 7) Paragraph C.5.g of Regulatory Guide 1.33 (and Section 5.2.19.1 of ANSI N18.7 which it references) shall be implemented with the addition of the modifier "normally" after each of the verbs (should) which the Regulatory Guide converts to "shall." It is FPC's intent to fully comply with the requirements of this paragraph, and any conditions which do not fully comply shall be documented and approved by management personnel. In these cases, the reason for the exception shall also be documented. The documentation shall be

NRC Regulatory Guide 1.33 (Continued)

retained for the same period of time as the affected preoperational test.

A 8) With regard to Section 3.4.2 of ANSI N18.7 - 1976 titled Requirements for the Onsite Operating Organization: Training Standards referenced in this Section shall be implemented if such Standards are included in Table 1-3 of the OQAP or in Technical Specifications or are otherwise part of the license of Crystal River Unit 3. FPC's method of documenting and otherwise meeting the remainder of the requirements of this Section are set forth in Section 1.7.1.2 of the OQAP, in the Technical Specifications, and in other commitments for Crystal River Unit 3.

A 9) With regard to Section 4.1 of ANSI N18.7 - 1976 titled General: The FPC audit program shall be implemented in accordance with and to meet the requirements of: ANSI N45.2.12 as endorsed in Table 1-3; Sections 1.7.1.16 and 18 of the OQAP; and the requirements of the Crystal River Unit 3 Technical Specifications.

A 10) With regard to Section 4.2 of ANSI N18.7 - 1976 titled Program Description: Two aspects are addressed in this Section: audits and independent reviews. The independent review program is implemented as required by the Technical Specifications for Crystal River Unit 3. The FPC audit program shall be described in accordance with and to meet the requirements of ANSI N45.2.12 as endorsed in Table 1-3 of the OQAP, the requirements of the Crystal River Unit 3 Technical Specifications, and Sections 1.7.1.16 and 18 of the OQAP.

A,D 11) With regard to Section 4.3 of ANSI N18.7 - 1976 titled Independent Review Process: The requirements of this Section, including all of its subparts, shall be met by compliance with the Technical Specification requirements for Crystal River Unit 3.

A 12) With regard to Section 4.5 of ANSI N18.7 - 1976 titled Audit Program: The FPC audit program shall be implemented in accordance with and to meet the requirements of: ANSI N45.2.12 as endorsed in Table 1-3; Sections 1.7.1.16, 17 and 18 of the OQAP; and the requirements of the Crystal River Unit 3 Technical Specifications.

D 13) With regard to Section 5.1 of ANSI N18.7 - 1976 titled Program Description: The fourth sentence in this Section required a "summary document"; FPC's OQAP (Chapter 1.7 of the FSAR) is organized in accordance with the 18 criteria of 10CFR50, Appendix B. FPC interprets this FSAR description to fulfill the requirements for a "summary document."

A 14) With regard to Section 5.2.2 of ANSI N18.7 - 1976 titled Procedure Adherence: The requirements of the Technical Specifications shall be used in lieu of the general requirements in this Section to control temporary changes.

NRC Regulatory Guide 1.33 (Continued)

A 15) With regard to Section 5.2.6 of ANSI N18.7 - 1976 titled Equipment Control: FPC shall comply with the "independent verification" requirements based on the definition of this phrase as given under our commitment to Regulatory Guide 1.74. 55

B The third sentence of the fourth paragraph requires independent verification "when appropriate." Although other cases may exist, it will generally not be considered "appropriate" to require independent verification when significant exposure to radiation would result (to comply with ALARA requirements).

F Since FPC sometimes uses descriptive names to designate equipment, the sixth paragraph, second sentence is replaced with: "Suitable means include identification number or other descriptions which are traceable to records of the status of inspections and tests."

I The first sentence in the seventh paragraph shall be complied with after clarifying "operating personnel" to mean trained employees assigned to or under the control of FPC management at Crystal River Unit 3.

C,F,G N-7 16) With regard to Section 5.2.7 of ANSI N18.7 - 1976 titled Maintenance and Modification:

In the first sentence of the first paragraph, FPC does not interpret the word "original" to modify "inspection requirements." Thus this sentence requires that technical requirements shall be equal to or better than the original, but the original level of inspection requirements (i.e. equal to that during construction) shall only be performed when maintenance or modification activities are similar in nature and extent to original construction activities. This makes this Section consistent with Section 5.2.17 of the Standard.

B Further with regard to Section 5.2.7 of ANSI N18.7 - 1976 titled Maintenance and Modification:

Since some emergency situations could arise which might preclude preplanning of all activities, FPC shall comply with the following alternate to the first sentence in the second paragraph: "Except in emergency or abnormal operating situations where immediate actions are required to protect the health and safety of the public, to protect equipment or personnel, or to prevent the deterioration of plant conditions to a possibly unsafe or unstable level, maintenance or modification of equipment shall be preplanned and performed in accordance with approved written procedures. Where approved written procedures would be required and are not used, the activities that were accomplished shall be documented after-the-fact and receive the same degree of review as if they had been preplanned."

B,C 17) With regard to Section 5.2.7.1 of ANSI N18.7 - 1976 titled Maintenance Programs: FPC shall comply with the requirements of the first sentence of the fifth paragraph, where practical. This clarification is needed since it is not always possible to promptly determine the

NRC Regulatory Guide 1.33 (Continued)

55

cause of the malfunction. In all cases, FPC shall initiate proceedings to determine the cause, and shall make such determinations promptly, where practical.

F 18) With regard to Section 5.2.8 of ANSI N18.7 - 1976 titled Surveillance Testing and Inspection Schedule: In lieu of a "master surveillance schedule," the following requirement shall be complied with: "A surveillance testing schedule(s) shall be established reflecting the status of all in-plant surveillance tests and inspections."

A 19) With regard to Section 5.2.9 of ANSI N18.7 - titled Plant Security and Visitor Control: The requirements of the Crystal River Unit 3 Security Plan shall be implemented in lieu of these general requirements.

A 20) With regard to Section 5.2.10 of ANSI N18.7 - 1976 titled Housekeeping and Cleanliness Control: The requirements of this Section, beginning with the last sentence of the first paragraph and continuing through the end of the Section, shall be implemented as described in FPC's commitments to ANSI N45.2.3 and N45.2.1 as set forth in Table 1-3 of the OQAP.

F 21) With regard to Section 5.2.13.1 of ANSI N18.7 - 1976 titled Procurement Document Control: The words "the same" in the last sentence are replaced with the words "an equivalent."

B,C 22) With regard to Section 5.2.17 of ANSI N18.7 - 1976 titled Inspection: With respect to paragraph four, not all inspections may require generation of a separate inspection procedure. Inspection requirements may be integrated into appropriate procedures or other documents with the procedure or document serving as the record. However, records of inspections shall be identifiable and retrievable.

H 23) With regard to Section 5.2.19 of ANSI N18.7 - 1976 titled Test Control: Item (1) of this Section is not considered applicable since the FPC OQAP does not cover preoperational testing.

B,C,D 24) With regard to Section 5.3.5(4) of ANSI N18.7 - 1976 titled Supporting Maintenance Documents: FPC may choose to include material from vendor manuals in any of three ways. (1) The applicable section of the manual may be duplicated, referenced in and attached to the procedure. (2) The procedure may simply state that the manual or a specific section is to be followed for performing a particular function; the manual must then be used in conjunction with the procedure for performing the activity. (3) The pertinent material from the manual, either as originally written or as modified by the author/reviewers of the procedure, may be written into and become a part of the procedure.

In options (1) and (3) above, the material meets the requirement to receive "the same level of review and approval as operating procedures" since the material is reviewed as part of the procedure review process. In option (2), the requirements shall be deemed to

55

have been fulfilled by requiring a copy of the pertinent manual (manual sections) to be available to and considered by persons conducting the review of the procedure.

A 25) With regard to Section 5.3.9 of ANSI N18.7 - 1976 titled Emergency Procedures: As directed by the NRC, FPC is developing a format for emergency procedures which is "symptom" based as opposed to "event" based as stipulated in Section 5.3.9.1.

B,C 26) With regard to Section 5.3.9.2 of ANSI N18.7 - 1976 titled Events of Potential Emergency: NRC review of the FSAR has identified all natural occurrences which affect Crystal River Unit 3. Therefore, FPC shall interpret item (11) to mean the natural occurrences which have been evaluated in the FSAR for Crystal River Unit 3.

A 27) With regard to Section 5.3.9.3 of ANSI N18.7 - 1976 titled Procedures for Implementing Emergency Plan: FPC's NRC accepted Emergency Plan for Crystal River Unit 3 shall be implemented in lieu of the requirements in this Section.

NRC Regulatory Guide 1.37 - "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants" (3/73) - Endorses ANSI N45.2.1 - 1973. 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

B,C,E1 Throughout this Standard, references are made to cleanness associated with initial installation. For operations activities, qualified maintenance department personnel shall determine what items within a particular cleanness level are appropriate. As an example, the Reactor Internals are initially classified as Level B. Section 3.1.2 requires this cleanness level to have "metal clean" surfaces and either a visual inspection or a dry white-cloth wipe. After use in the Reactor Coolant System, FPC does not intend to clean components removed for maintenance or inspection until they have a bright "metal clean" surface, nor do we necessarily commit to performance of a dry white-cloth wipe. The chemistry within the system is designed to obtain a tightly adhering metal oxide film (which reduces the luster of metal) and ALARA considerations may preclude a dry white-cloth wipe.

Components which have been removed from a system shall be considered as being the same cleanness level as the system from which they were removed. Such components need not be recleaned to meet initial installation cleanness levels prior to reinstallation. However, FPC shall assure that measures are taken to prevent degradation of the previously established or existing cleanness state of the system.

G,N-7 1) For operational phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, FPC shall either control these activities under this OQAP or under an NRC accepted Construction QA Program. When this OQAP is used, FPC shall comply with the requirements of the Regulatory Position documented in this Guide in that QA programmatic/administrative requirements included therein (subject to the clarifications below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).

B-S-5 2) This Guide and Standard are applicable to those areas of the Quality Assurance Program addressing on-site cleaning of materials and components, cleanliness control, and cleaning and layup of fluid systems during the operational phase: They do not cover off-site activities unless invoked in procurement documents.

F 3) With regard to Paragraph C.3 of Regulatory Guide 1.37: The water quality for final flushing of fluid systems and associated components shall be at least equivalent to the quality of the operating system water except for the oxygen and nitrogen content; but this does not infer that chromates or other additives, normally in the system water, will be added to the flush water.

D,F 4) With regard to Paragraph C.4 of Regulatory Guide 1.37: Expendable materials, such as inks and related products; temperature indicating sticks; tapes; gummed labels; wrapping materials (other than polyethylene); water soluble dam materials; lubricants; NDT penetrant materials and coolants, desiccants, which contact stainless steel or nickel alloy surfaces shall not contain lead, zinc, copper, mercury, cadmium and other low melting point metals, their alloys or compounds as basic and essential chemical constituents. No more than 0.1 percent (1,000 ppm) halogens shall be allowed where such elements are leachable or where they could be released by breakdown of the compounds under expected environmental conditions. 55

A 5) With regard to Section 1.4 of ANSI N45.2.1 - 1973 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.1.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

NRC Regulatory Guide 1.37 (Continued)

6) With regard to Section 5 of ANSI N45.2.1 - 1973 titled Installation Cleaning: The recommendation that local rusting on corrosion resistant alloys be removed by mechanical methods is interpreted to mean that local rusting may be removed mechanically, but the use of other removal means is not precluded.

7) With regard to Section 9 of ANSI N45.2.1 - 1973 titled Records: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI N45.2.9 as specified in Table 1-3.

NRC Regulatory Guide 1.38 - "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants" (Rev. 2, 5/77) - Endorses ANSI N45.2.2 - 19[illegible] 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

A 1) With regard to Section 1.4 of ANSI N45.2.2 - 1972 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

D 2) With regard to Section 2.1 of ANSI N45.2.2 - 1972 titled Planning: (First sentence) The specific items to be governed by the Standard shall be identified on the "Safety Listing". However, the Standard (as modified by clarifications in Table 1-3) is part of FPC's OQAP and it shall therefore, be applied to those structures, systems, and components which are included in that Program.

A 3) With regard to Section 2.3 of ANSI N45.2.2 - 1972 titled Results: The specific methods for performing and documenting tests and inspections are given in Sections 1.7.1.10 and 11 of the OQAP. The requirements in these Sections shall be implemented in lieu of the general requirements here.

A 4) With regard to Section 2.4 of ANSI N45.2.2 - 1972 titled Personnel Qualifications: Specific requirements for personnel qualifications and training are set forth in Section 1.7.1.2 and in the commitments to training standards in Table 1-3 of the OQAP. These requirements shall be implemented in lieu of the general requirements stated in this Section.

E 5) With regard to Section 2.7 of ANSI N45.2.2 - 1972 titled Classification of Items: FPC may choose not to explicitly use the four level classification system. However, the specific requirements of the Standard that are appropriate to each class are generally applied to the items suggested in each classification and to similar items.

F,C 6) With regard to Section 3.2.1 of ANSI N45.2.2 - 1972 titled Level A Items: As an alternate to the requirements for packaging and containerizing items in storage to control contaminants (Items (4) and (5)), FPC may choose a storage atmosphere which is free of harmful contaminants in concentrations that could produce damage to stored items. Similarly (for Item (7)) FPC may obviate the need for caps and plugs with an appropriate storage atmosphere, and may choose to protect weld-end preparations and threads by controlling the manner in which the items are stored. These clarifications apply whenever items (4), (5) or (7) are subsequently referenced and to Section 3.5.1 titled Caps and Plugs and Section 3.4 titled Methods of Preservation.

NRC Regulatory Guide 1.38 (Continued)

F,C 7) With regard to Section 3.3 of ANSI N45.2.2 - 1972 titled Cleaning: (Third sentence) FPC interprets "documented cleaning methods" to allow generic cleaning procedures to be written which are implemented, as necessary, by trained personnel. Each particular cleaning operation may not have an individual cleaning procedure, or which type(s) of solvent(s) may be used in a particular application. 55

F 8) With regard to Section 3.4 of ANSI N45.2.2 - 1972 titled Methods of Preservation: (First sentence) FPC shall comply with these requirements subject to the clarifications of Section 3.2.1 (4) and (5) above, and the definition of the phrase "deleterious corrosion" to mean that corrosion which cannot be subsequently removed and which adversely affects form, fit, or function.

A 9) With regard to Section 3.6 of ANSI N45.2.2 - 1972 titled Barrier and Wrap Material and Desiccants: This section requires the use of nonhalogenated materials in contact with austenitic stainless steel. Refer to Regulatory Guide 1.37 for the FPC position.

E,C 10) With regard to Section 3.7.1 of ANSI N45.2.2 - 1972 titled Containers: Cleated, sheathed boxes may be used up to 1000 lbs. rather than 500 lbs. as specified in 3.7.1(1). This type of box is safe for, and has been tested for, loads up to 1000 lbs. Other national standards allow this (see Federal Specification PPP-B-601). Special qualification testing may be required for loads above 1000 lbs.

B,C 11) With regard to Section 3.7.2 of ANSI N45.2.2 - 1972 titled Crates and Skids: Skids or runners shall normally be used on containers with a gross weight of 500 lbs. or more. Skids or runners are normally fabricated from 4 x 4 inch nominal lumber size, minimum, and laid flat except where this is impractical because of the small dimensions of the container. If forklift handling is required, minimum floor clearance for forklift tines shall be provided.

E,C 12) With regard to Section 4.2.2 of ANSI N45.2.2 - 1972 titled Closed Carriers: The use of fully enclosed furniture vans, as recommended in (2) of this Section, is not considered a requirement. FPC assures adequate protection from weather or other environmental conditions by a combination of vehicle enclosures and item packaging.

G 13) With regard to Sections 4.3, 4.4 and 4.5 of ANSI N45.2.2 - 1972, respectively, Precautions During Loading and Transit, Identification and Marking, and Shipment from Countries Outside the United States: FPC shall comply with the requirements of these Sections subject to the clarifications taken to other Sections which are referenced therein.

B,E,C 14) With regard to Section 5.2.1 of ANSI N45.2.2 - 1972 titled Shipping Damage Inspection: Warehouse personnel normally visually scrutinize incoming shipments for damage of the types listed in this Section; this activity is not necessarily performed prior to unloading. Since all required items receive the Item Inspection of Section 5.2.2, separate documentation of the Shipping Damage Inspection is not

NRC Regulatory Guide 1.38 (Continued)

necessary. Release of the transport agent after unloading and the signing for receipt of the shipment may be all of the action taken to document completion of the Shipping Damage Inspection. Any nonconformance noted shall be documented and dispositioned as required by Section 1.7.1.15 of the OQAP. The person performing the visual scrutiny during unloading is not considered to be performing an inspection function as defined under Regulatory Guides 1.58 and 1.74; therefore, while he shall be trained to perform this function, he may not necessarily be certified (N45.2.6) as an Inspector.

D,C 15) With regard to Section 5.2.2 of ANSI N45.2.2 - 1972 titled Item Inspection: The second division of this subsection requires six additional inspection activities if an item was not inspected or examined at the source. The Nuclear Engineering and/or Quality Programs Department shall determine and document the extent of receipt inspection based on consideration of Section 5.2.2.

F,C 16) With regard to Section 6.1.2 of ANSI N45.2.2 - 1972 titled Levels of Storage: Subpart (2) is replaced with the following:

(2) Level B items shall be stored within a fire resistant, weathertight, and well ventilated building or equivalent enclosure. This building shall be situated and constructed so that it shall not normally be subject to flooding; the floor shall be paved or equal, and well drained. If any outside waters should come in contact with stored equipment, such equipment shall be labeled or tagged nonconforming, and then the nonconformance document shall be processed and evaluated in accordance with Section 1.7.1.15. Items shall be placed on pallets for shoring or shelves to permit air circulation. The building shall be provided with heating and temperature control or its equivalent to reduce condensation or corrosion. Minimum temperature shall be 40°F and maximum temperature shall be 140°F or less if so stipulated by a manufacturer.

S-I 17) With regard to Section 6.2.1 of ANSI N45.2.2 - 1972 titled Access to Storage Areas: Items which fall within the Level D classification of the Standard may be stored in an area which is posted to limit access, but other controls such as fencing or guards are not considered to be required.

E 18) With regard to Section 6.2.4 of ANSI N45.2.2 - 1972 titled Storage of Food and Associated Items: This Section is replaced with the following: "The use of food, drinks, and salt tablet dispensers in any storage area shall be controlled and shall be limited to designated areas where use or storage is not deleterious to stored items".

F,C 19) With regard to Section 6.2.5 of ANSI N45.2.2 - 1982 titled Measures to Prevent Entrance of Animals: This Section is replaced with the following: "Warehouse personnel shall be alert to detect evidence of rodents or small animals in indoor storage areas. If any such evidence is detected, a survey

or inspection shall be utilized to determine the extent of any possible damage or contamination. Exterminators, traps, poisons or other appropriate measures shall be used to control these animals to minimize possible undesirable effects on stored materials." 55

D 20) With regard to Section 6.3.3 of ANSI N45.2.2 - 1972 titled Storage of Hazardous Material: This Section is replaced with the following: "Hazardous chemicals, paints, solvents and similar materials shall be stored in approved cabinets which are not in close proximity to installed plant systems which are required for safe shutdown or long term cooling of the plant."

21) With regard to Section 6.4.2 of ANSI N45.2. - 1972 titled Care of Items: The following alternates are provided for indicated subparts:

B (5) "Space heaters in electrical equipment shall be energized unless a documented engineering evaluation determines that such space heaters are not required."

B (6) "Large (greater than or equal to 50HP) rotating electrical equipment shall be given insulation resistance tests on a scheduled basis unless a documented engineering evaluation determines that such tests are not required."

B (7) "Prior to being placed in storage, rotating equipment weighing over approximately 50 pounds shall be evaluated by engineering personnel to determine if shaft rotation in storage is required: The results of the evaluation shall be documented. If rotation is required, it shall be performed at specified intervals, be documented, and be conducted so that parts receive a coating of lubrication where applicable and so that the shaft does not come to rest in the same position occupied prior to rotation. For long shafts or heavy equipment subject to undesirable bowing, shaft orientation after rotation shall be specified and obtained."

H,F 22) With regard to Section 6.5 of ANSI N45.2.2 - 1972 titled Removal of Items From Storage: FPC does not consider the last sentence of this Section to be applicable to the operational phase due to the relatively short period of time between installation and use. The first sentence of the Section is replaced with: "FPC shall develop, issue, and implement a procedure(s) which cover(s) the removal of items from storage. The procedure(s) assure(s) that the status of all material issued is know, controlled, and appropriately dispositioned."

B 23) With regard to Section 6.6 of ANSI N45.2.2 - 1972 titled Storage Records: FPC shall comply with the requirements of this Section with the clarification that, for record purposes only the access of non-FPC personnel into indoor storage areas shall be recorded. Unloading or pick-up of material shall not be considered access, nor shall inspection by NRC or other regulatory agents, nor shall tours by non-FPC employees who are accompanied by FPC employees. If warehouse personnel are not on duty, access to and egress from the indoor storage area shall be documented.

55

B,F,C

24) With regard to Section 7.3 of ANSI N45.2.2 - 1972 titled Hoisting Equipment: Rerating of hoisting equipment is considered only when absolutely necessary. Prior to performing any lift above the load rating, the equipment manufacturer must be contacted for his approval and direction. The manufacturer must be requested to supply a document granting approval for a limited number of lifts at the new rating and any restrictions involved, such as modifications to be made to the equipment, the number of lifts to be made at the new rating, and the test lift load. At all times, the codes governing rerating of hoisting equipment must be observed.

If rerating of hoisting equipment is necessary and FPC cannot or does not contact the equipment manufacturer as described above, the test weight used in temporarily rerating hoisting equipment for special lifts shall be at least equal to 110% of the lift weight. A dynamic load test over the full range of the lift using a weight at least equal to the lift weight shall be performed.

NRC Regulatory Guide 1.39 - "Housekeeping Requirements for Water-Cooled Nuclear Power Plants" (Rev. 2, 9/77) - Endorses ANSI N45.2.3 - 1973 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

G,N-7 1) For operational phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, FPC shall either control these activities under this OQAP or under an NRC accepted Construction QA Program. When this OQAP is used, FPC shall comply with the requirements of the Regulatory Position documented in this Guide in that QA programmatic/administrative requirements included therein (subject to the clarifications below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).

A 2) With regard to Section 1.4 of ANSI N45.2.3 - 1973 titled Definitions: Definitions in this Stanard which are not included in ANSI N45.2.10 shall be used: All definitions which are not included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

E,S-3 3) With regard to Section 2.1 of ANSI N45.2.3 - 1971 titled Planning: FPC may choose not to utilize the five-level zone designation system, but shall utilize standard janitorial and work practices to maintain a level of cleanliness commensurate with company policy in the areas of housekeeping, plant and personnel safety, and fire protection.

D Cleanliness shall be maintained, consistent with the work being performed, so as to prevent the entry of foreign material into safety-related systems. This shall include, as a minimum, documented cleanliness inspections which shall be performed prior to system closure. As necessary, (e.g., the opening is larger than the tools being used) control of personnel, tools, equipment,and supplies shall be established when major portions of the reactor system are opened for inspection, maintenance or repair.

I Additional housekeeping requirements shall be implemented as required for control of radioactive contamination.

A 4) With regard to Section 2.2 of ANSI N45.2.3 - 1973 titled Procedures and Instructions: Procedures and instructions shall be implemented as set forth in Sections 1.7.1.5, 10 and 11 of the OQAP and by compliance with the Crystal River Unit 3 Technical Specifications and ANSI N18.7 as set forth in Table 1-3 of that Program in lieu of the requirements set forth here.

NRC Regulatory Guide 1.39 (Continued)

55

H 5) With regard to Section 3.1 of ANSI N45.2.3 - 1973 titled Control of Site Area: Not applicable to the operational phase.

E,S-3 6) With regard to Section 3.2 of ANSI N45.2.3 - 1973 titled Control of Facilities: FPC may choose not to utilize the five-level zone designation system, but shall utilize standard janitorial and work practices to maintain a level of cleanliness commensurate with company policy in the areas of housekeeping, plant and personnel safety, and fire protection.

D Cleanliness shall be maintained, consistent with the work being performed, so as to prevent the entry of foreign material into safety-related systems. This shall include, as a minimum, documented cleanliness inspections which shall be performed prior to system closure. As necessary, (e.g., the opening is larger than the tools being used) control of personnel, tools, equipment, and supplies shall be established when major portions of the reactor system are opened for inspection, maintenance or repair.

I Additional housekeeping requirements shall be implemented as required for control of radioactive contamination.

A,H,D 7) With regard to Section 3.3 of ANSI N45.2.3 - 1973 titled Materials and Equipment: The first paragraph in this Section is not applicable to the operational phase. Most of the items in this Section were written for construction activities. Maintenance and modification activities which are similar in nature and extent to construction activities shall be handled as set forth in Item I above. The portions of this Section which are considered applicable by responsible maintenance supervisory personnel shall be complied with as stated.

A,H,D 8) With regard to Section 3.4 of ANSI N45.2.3 - 1973 titled Construction Tools, Supplies, and Equipment: Most of the items in this Section were written for construction activities. Maintenance and modification activities which are similar in nature and extent to construction activities shall be handled as set forth in Item I above. The portions of this Section which are considered applicable by responsible maintenance supervisory personnel shall be complied with as stated.

H 9) With regard to Section 3.5 of ANSI N45.2.3 - 1973 titled Surveillance, Inspection, and Examination: Subparagraph (1) is not applicable to the operational phase; (2), (3) and (4) shall be implemented.

A 10) With regard to Section 4 of ANSI N45.2.3 - 1973 titled Records: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI N45.2.9 as specified in Table 1-3.

NRC Regulatory Guide 1.54 - "Quality Assurance Requirements for Protective Coatings Applied to Water-Cooled Nuclear Power Plants" (Rev. 0, 6/73) - Endorses ANSI N101-4 - 1972 55

N-10 The Quality Program (OQAP) no longer specifies compliance with the requirements of this Guide, although the ANSI Standard which it endorses may be used for guidance.

NRC Regulatory Guide 1.58 - Qualification of Nuclear Power Plant Inspection, Examination and Testing Personnel" (Rev. 1, 9/80) - Endorses ANSI N45.2.6 - 1978).

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

A 1) With regard to Regulatory Position C.1 (and Section 1.2 of ANSI N45.2.6 - 1978 which it references), the qualifications of each member of the facility staff shall be as set forth in Technical Specifications or in Items 2 or 8 below.

A 2) With regard to Regulatory Positions C.2, C.3 and C.6 (and Sections 1.2 and 3.5 of ANSI N45.2.6 - 1978 which they reference), personnel performing inspections, examinations or tests which are NOT covered by Item 1 above or Items 8, 9 or 12 below shall be qualified as follows.

S-2 a. Persons performing nondestructive examinations (NDE) and other activities covered by SNT-TC-1A-1975 shall be qualified as specified in that Standard and as may be required by Sections III or XI of the ASME B&PV Code.

S-2 b. QC personnel performing activities at the Crystal River site, whether FPC personnel or contract personnel, shall meet the requirements of ANSI N45.2.6 - 1978 as clarified in this Table.

G 3) With regard to Regulatory Position C.4 (and Section 1.5 of ANSI N45.2.6 - 1978 which it references), FPC's generic clarification at the beginning of Table 1-3 is consistent with this NRC Position.

S-2 4) With regard to Regulatory Position C.5 (and Section 3.4 of ANSI N45.2.6 - 1978 which it references), FPC reserves the right to specify activities which may be conducted by use of documented position descriptions rather than using the specific Level I, II and iil designation used in the Standard. However, the qualifications of personnel performing similar activities shall be consistent with the qualification requirements of the Standard except as noted in Items 1 and 2 above and Item 8 below.

S-3 5) With regard to Regulatory Position C.8, FPC has an ALARA program which is applicable to all personnel performing activities at Crystal River Unit 3 as described in the Regulatory Position.

H 6) Regulatory Position C.9 is not applicable to Crystal River Unit 3.

S-2 7) With regard to Regulatory Position C.10 (and Section 2.2 of ANSI N45.2.6 - 1978 which it references), FPC shall document exceptions to the qualifications requirements as set forth in the clarification of Section 3.5: Initial and subsequent evaluation of other personnel shall be performed and documented either in required FPC personnel evaluations or other suitable records.

NRC Regulatory Guide 1.58 (Continued)

A 8) QA personnel performing inspections, examinations and testing as part of their routine assignment as auditors or lead auditors shall be qualified as set forth in commitments to ANSI N45.2.23 elsewhere in this Table.

S-4 9) With regard to Section 1.2 of ANSI N45.2.6 - 1978 titled Applicability: The third paragraph requires that the Standard be used in conjunction with ANSI N45.2; FPC no longer specifically commits to ANSI N45.2 in the OQAP. The fourth paragraph requires that the Standard be imposed on personnel other than FPC employees; the applicability of the Standard to suppliers shall be documented and applied, as appropriate, in the procurement documents for such suppliers.

A 10) With regard to Section 1.4 of ANSI N45.2.6 - 1978 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

D 11) With regard to Section 2.5 of ANSI N45.2.6 - 1978 titled Physical: FPC shall implement the requirements of this Section with the stipulation that, where no special physical characteristics are required, none shall be specified. The converse is also true: If no special physical requirements are stipulated by FPC, none are considered necessary.

S-2 12) With regard to Section 3.5 of ANSI N45.2.6 - 1978 titled Education and Experience - Recommendations: FPC reserves the right to use personnel who do not meet all the educational and experience requirements of this Section provided: The use of personnel who do not meet these requirements shall be the exception rather than the rule and each such case shall receive a documented management evaluation and justification for the exception. An example of a documented management evaluation and justification would be one which includes objective criteria (examination, review of actual work performed) to demonstrate that equivalent competence is possessed by such an individual.

NRC Regulatory Guide 1.64 - "Quality Assurance Requirements for the Design of Nuclear Power Plants" (Rev. 2, 6/76) - Endorses ANSI N45.2.11 - 1974. 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

G,N-7 1) For operational phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, FPC shall either control these activities under this OQAP or under an NRC accepted Construction QA Program. When this OQAP is used, FPC shall comply with the requirements of the Regulatory Position documented in this Guide in that QA programmatic/administrative requirements included therein (subject to the clarification below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).

C,E 2) With regard to Paragraph C.2(1) of Regulatory Guide 1.64: If in an exceptional circumstance the designer's immediate Supervisor is the only technically qualfied individual available, this review can be conducted by the Supervisor, providing that: (a) the other requirements of the Regulatory Position are satisfied, (b) the justification is individually documented and approved by the Supervisor's management, and (c) quality assurance audits cover frequency and effectiveness of use of Supervisors as design verifiers to guard against abuse.

A 3) With regard to Section 1.4 of ANSI N45.2.11 - 1974 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

A,S-3 4) With regard to Sections 2.1 and 2.2 of ANSI N45.2.11 - 1974 titled, respectively, Establishment and Documentation and Program Procedures: Sections 1.7.1.16 and 1.7.1.18 of the OQAP and commitments to ANSI N45.2.12 as set forth in Table 1-3 of that Program shall be met in lieu of the last paragraph of Section 2.1 and items 6, 12 and 13 in Section 2.2.

N-5 5) With regard to Section 5.2.4 of ANSI N45.2.11 - 1974 titled Documentation: For the documentation of interdisciplinary design reviews, there must be documented evidence of the acceptability of design documents or portions thereof, prior to release (material, stress, physics, mechanical, electrical, concrete, etc.). The signature or initials of those who determine the acceptability of the design relative to their respective disciplinary area of concern should be on the document or on a separate form traceable to the document. A document that indicates the reviewer's comments need not be retained.

NRC Regulatory Guide 1.64 (Continued)

N-2 6) With regard to Section 6.1 of ANSI N45.2.11 - 1974 titled General: The third paragraph in this Section stipulates certain requirements relative to "the results of design verification". FPC may comply with these requirements by having the reviewer(s) sign and date an appropriate document providing the following conditions are also met: 55

a) Documented engineering/design procedures are established which cover the extent of design review.

b) The procedures identify the duties of the reviewer and the extent of his responsibility for which he attests with his signature.

c) The procedures specify the extent of documentation necessary for the type of design verification applicable to the complexity of the design.

d) The signature and date is affixed in accordance with the procedures.

N-3 FPC shall also permit initials to be used in lieu of the signature required above IF a file is maintained to correlate characteristic initials versus individuals such that each set of characteristic initials can be traced to an individual. This correlation must be readily available to NRC inspectors whenever the document is being used.

N-4 7) The timing of design verification is not mentioned in the Standard. FPC shall perform verification in a timely manner. If other than by qualification testing of a prototype or lead production unit, verification should be completed prior to release for procurement, manufacturing or construction or release to another organization for use in other design activities. In those cases where this timing cannot be met, the design verification may be deferred, provided that the justification for this action is documented and the unverified portion of the design output document and all design output documents, based on the unverified data, are appropriately identified and controlled. Site activities associated with a design or design change shall not proceed without verification past the point where the installation would become irreversible without extensive demolition and rework. In all cases, the design verification shall be completed prior to relying upon the component, system, or structure to perform its safety-related function.

A,S-3 8) With regard to Section 10 of ANSI N45.2.11 - 1974 titled Records: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI N45.2.9 as specified in Table 1-3. The additional requirements of the first sentence of the second paragraph in this Section shall also be met.

A,S-3 9) With regard to Section 11 (including Subsections 11.1 through 11.7) of ANSI N45.2.11 - 1974, titled Audits: The FPC's Audit Program shall be implemented in accordance with and to meet the requirements of: ANSI N45.2.12 as endorsed in Table 1-3; Sections 1.7.1.16 and 18 of

55

the OQAP; and the requirements of Crystal River Unit 3 Technical Specifications.

N-11 10) FPC does not require the FSAR to be a design document. However, if the FSAR contains any design or design input that has not been previously documented, reviewed and approved in accordance with the requirements contained in the OQAP or another approved design control QA program and if the FSAR is used as a design document during the design process, that specific information must be controlled and verified in accordance with the commitments here and Section 1.7.1.3 of the OQAP.

NRC Regulatory Guide 1.74 - "Quality Assurance Terms and Definition" (2/74) - Endorses ANSI N45.2.10 - 1973 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

S-7 1) FPC reserves the right to define additional words or phrases which are not included in this Standard. Such additional definitions shall be documented in appropriate procedures and/or in attachments/ appendices to quality assurance procedures/manuals, or in Sections of the OQAP.

I 2) In addition to the Standard's definition of "Inspection," FPC shall use the following: "Inspection (when used to refer to activities that are NOT performed by quality organization personnel) - Examining, viewing closely, scrutinizing, looking over or otherwise checking activities. Personnel performing these functions are not necessarily certified to ANSI N45.2.6."

S-7 When FPC intends for inspections to be performed in accordance with the OQAP by personnel certified as required by that Program and for activities defined by "Inspection" in ANSI N45.2.10, appropriate references to the plant quality organization which shall perform the activity or to Quality Procedures to be used for performing the activity shall be made. If such references are NOT made, inspections are to be considered under the additional definition given above.

I 3) In addition to the Standard's definition of "procurement documents," FPC shall utilize the definitions given in ANSI N45.2.13 and in Regulatory Guide 1.74. The compound definition is given as follows: Procurement documents - Contractually binding documents that identify and define the requirements which items or services must meet in order to be considered acceptable by the purchaser. They include documents which authorize the seller to perform services or supply equipment, material or facilities on behalf of the purchaser (e.g., Engineering Service Agreements (agreements for engineering, construction, or consulting services)), contracts, letters of intent, work authorization (in some cases), purchase requisitions, purchase orders, or proposals and their acceptance, drawings, specifications, or instructions which define requirements for purchase.

I 4) "Audit" (Shall be a modification of the word - to allow the use of subjective evidence if no objective evidence is available - as defined in Section 1.4 of ANSI N45.2.12 - 1977 and Section 1.4.3 of ANSI N45.2.23 - 1978 as opposed to the definition given in ANSI N45.2.10 - 1973) - A documented activity performed in accordance with written procedures or checklists to verify, by examination and evaluation of objective evidence where available, that applicable elements of the quality assurance program have been developed, documented and effectively implemented in accordance with specified requirements. An audit should not be confused with surveillance or inspection for the sole purpose of process control or product acceptance.

NRC Regulatory Guide 1.74 (Continued)

S-8 5) "Independent Verification" - Verification by an individual other than the person who performed the operation or activity being verified that required actions have been completed. Such verification shall not require confirmation of the identical action when other indications provide assurance or indication that the prescribed activity is in fact complete. Examples include, but are not limited to: verification of a breaker opening by observing the actuation of status or indicating lights at the required panel-meter indicated value; verification that a valve has been positioned by observing the starting or stopping of flow on meter indications or by remote valve positions indicating lights.

S-8 6) "Must" - (Not defined in any ANSI Standard) - An internally auditable requirement imposed by FPC management upon its employees, contractors, and agents - above and in excess of the legally binding requirements of the appropriate regulatory body. Such items are internally required but not externally enforceable.

S-8 7) "NRC accepted Construction QA Program" - (1) a program for design or construction which was reviewed by the QA organization of the NRC and accepted for use; (2) the revision of that NRC accepted program which is in effect at the time that FPC authorizes commencement of work; and (3) a program which the FPC QA organization reviews and concurs that the QA Program controls are acceptable for the activity to be performed.

S-4 8) "Program Deficiencies" (Not defined in ANSI N45.2.10, but used and defined differently in ANSI N45.2.12) - Failure to develop, document or implement effectively any applicable element of the OQAP.

S-4 9) "Quality Assurance Program Requirements" (Not defined in ANSI N45.2.10 but used and defined differently in ANSI N45.2.13) - Those individual requirements of the OQAP which, when invoked in total or in part, establish the requirements of the Quality Program for the activity being controlled. Although not specifically used in the OQAP, ANSI N45.2 may be imposed upon FPC's suppliers.

I 10) "Quality assurance records" - (Not defined in ANSI N45.2.10 and defined without "expansion" in ANSI N45.2.9 - 1974) - The definition of "quality assurance records" which is given in Section 1.4 of ANSI N45.2.9 - 1974 shall be used with the clarification that "quality assurance records" are the Lifetime Quality Assurance Records defined in Section 2.2.1 and the Nonpermanent Quality Assurance Records defined in Section 2.2.2 of the Standard as well as those records specifically required to be retained by the applicable portions of the Code of Federal Regulations, Title 10 and as defined in Crystal River Technical Specification 6.10.

S-8 11) "Will" - (Not defined in any ANSI standard) - Means the same as "shall" except when context shows that it is simply being used to indicate events which are to take place in the future. In the latter case, "will" is normally followed by "be".

S-7 12) "Quality Control" - FPC uses the definition provided in FSAR Section 1.7.4.

55

NRC Regulatory Guide 1.88 - "Collection, Storage and Maintenance of Nuclear Power Plant Quality Assurance Records" (Rev. 2, 10/76 - Endorses ANSI N45.2.9 - 1974)

The Quality Program (OQAP) complies with the requirements of this guide with the following clarifications:

A,I 1) With regard to Section 1.4 of ANSI N45.29 - 1974 titled Definitions: The only definition given in this Standard is not included in ANSI N45.2.10. The Standard's definition of "quality assurance records" shall be used with the clarification that "quality assurance records" are the Lifetime Quality Assurance Records defined in Section 2.2.1 and the Nonpermanent Quality Assurance Records defined in Section 2.2.2 as well as those records specifically required to be retained by the applicable portions of the Code of Federal Regulations, Title 10 and as defined in Crystal River Technical Specification 6.10. This clarification is also given in this Table under Regulatory Guide 1.74.

D 2) With regard to Section 3.2.1 of ANSI N45.2.9 - 1974 titled Generation of Quality Assurance Records: The phrase "completely filled out" is clarified to mean that sufficient information is recorded to fulfill the intended purpose of the record.

F 3) With regard to Section 3.2.2 of ANSI N45.2.9 - 1974 titled Index: The phrase "an index" is clarified to mean a collection of documents or indices which, when taken together, supply the information attributed to "an index" in the Standard.

F,C The specification location of a record "within a storage area" may not always be delineated (e.g. The specific location within a computer record file may not be constant. Further, FPC may utilize a computer assisted random access filing system where such a "location" could not be readily documented, nor would such a location be meaningful). The storage location shall be delineated, but where file locations change with time, the specific location of a record within that file may not always be documented.

S-5 4) With regard to Section 4.2 of ANSI N45.2.9 - 1974 titled Timeliness: FPC's contractual agreement with its vendors, A/E, constructors, and suppliers shall constitute fulfillment of the requirements of this Section.

D,F 5) With regard to Section 5.3 of ANSI N45.2.9 - 1974 titled Storage: The first sentence is clarified by stating that an individual or group of individuals or a classification of employee shall be designated and assigned the responsibility to enforce written storage procedures. The term "custodian" may or may not be used as part of that designation.

S-6 6) With regard to Section 5.4 of ANSI N45.2.9 - 1974 titled Preservation: The following clarification is substituted for the current Subsection 5.4.2 "Records shall not be stored loosely. They shall be secured for storage in file cabinets or on shelving in containers".

NRC Regulatory Guide 1.88 (Continued)

Although not a verbatim quote, this is the position taken in the latest consensus Standard (ANSI/ASME NQA-1b-1981, Supplement 17S-1, Section 4.2(b)).

S-6 7) With regard to Subsection 5.4.3 of ANSI N45.2.9 - 1974 titled Special Processed Records: The following clarification is substituted for the current Subsection 5.4.3: "Provisions shall be made for special processed records (such as radiographs, photographs, negatives, microfilm and magnetic media) to prevent damage from excessive light, stacking, electromagnetic fields, temperature and humidity as appropriate to the record type." This is the position taken in the latest consensus Standard (ANSI/ASME NQA-1b-1981, Supplement 17S-1, Section 4.2(c)).

D 8) With regard to Section 5.5 of ANSI N45.2.9 - 1974 titled Safekeeping: Routine general office and nuclear site security systems and access controls are provided: No special security systems are required to be established for record storage areas.

F 9) With regard to Section 5.6 of ANSI N45.2.9 - 1974 titled Facility: This Section provides no distinction between temporary and permanent facilities. To cover temporary storage, the following clarification is added: Active records (those completed but not yet duplicated or placed on microform) may be temporarily stored in one-hour fire rated file cabinets. In general, records shall not be maintained in such temporary storage for more than three months after completion without being duplicated (for dual storage) or being placed on microform. Any exceptions to this three month storage shall be evaluated and approved by the Director, Quality Programs; a list of all such excepted records shall be maintained and available for NRC review. Open-ended documents (those revised or updated on a more-or-less continuing basis over an extended period of time (e.g. personnel qualification and training documents, equipment history cards, audit or surveillance schedules)) and those which are cumulative in nature (e.g. nonforming item logs, control room log books, night order books) are not considered as QA records since they are not "complete". These types of documents shall become QA records: when they are issued as a specific revision (e.g. the audit schedule); when they are filled-up or discontinued (e.g. log books or equipment history cards); on a predefined periodic basis when the completed portion of the on-going document shall be transferred to the records storage facility as a "record" (e.g. training and qualification records). The applicable provision of Section 5.3 shall be met by QA records in temporary storage.

S-6 Where duplicate storage is employed as permitted by the 2nd paragraph, no special construction requirements are applicable. However, the record storage locations shall be sufficiently separated from one another that they are not generally susceptible to simultaneous destruction by the same natural disaster (e.g. fire, flooding). Although not a verbatim quote, this is the position taken in the latest consensus Standard (ANSI/ASME NQA-1b-1981, Supplement 17S-1, Section 4.4.2).

55

S-6 The 4th paragraph, item 3 is modified to require a two-hour minimum fire rating to be consistent with the 1979 version of the Standard, NQA-1b-1981, and NRC Criteria for Record Storage Facilities (Guidance-ANSI N45.2.9, Section 5.6) issued 7/1/80.

S-6 The 4th paragraph, item 9 is clarified to read: "No pipes or penetrations except those used exclusively for fire protection, lighting, temperature/humidity control, or communications are to be located within the facility. All such penetrations shall be sealed or dampened to comply with a minimum two-hour fire protection rating." This is the position taken in the latest consensus Standard (ANSI/ASME NQA-1b-1981, Supplement 17S-1, Section 4.4.1(j)).

D 10) With regard to Section 6.2 of ANSI N45.2.9 - 1974 titled Accessibility: The second paragraph of this Section is clarified to mean that persons authorized access shall be designated. However, the designation may be by generic group (e.g. all Records personnel; all licensed personnel; all FPC employees) or by job title/function. In such cases, no "list," per se, would be generated.

NRC Regulatory Guide 1.94 - "Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel during the Construction Phase of Nuclear Power Plants" (Rev. 1, 4/76) - Endorses ANSI N45.2.5 - 1974.

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

G,N-7 1) For operational phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, FPC shall either control these activities under this OQAP or under an NRC accepted Construction QA Program. When this OQAP is used, FPC shall comply with the requirements of the Regulatory Position documented in this Guide in that QA programmatic/administrative requirements included therein (subject to the clarifications below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).

H 2) With regard to Section 1.1 of ANSI N45.2.5 - 1974 titled Scope: The last paragraph of this Section is not applicable to the operational phase.

H,B,D 3) With regard to Section 1.3 of ANSI N45.2.5 - 1974 titled Applicability: The first sentence in this Section is not applicable to the operational phase. FPC shall comply with the third sentence in this Section with the clarifications that "importance of the item or service involved" is interpreted to mean those to which the OQAP applies, and the extent of coverage shall be defined by supervisory maintenance personnel by the way in which they implement the other requirements of this Standard.

H In the second paragraph of this Section, FPC shall substitute the words "maintenance and modification" for the word "construction" as the modifier of "procedures".

D 4) With regard to Section 1.3 of ANSI N45.2.5 - 1974 titled Responsibility: This Section's requirements are met by the definitions for positions and the organizational responsibilities outlined in the Technical Specifications, Section 1.7.1.1 of the OQAP, and the position descriptions for plant personnel.

A 5) With regard to Section 1.4 of ANSI N45.2.5 - 1974 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used: All definitions which are included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

NRC Regulatory Guide 1.94 (Continued)

D 6) With regard to Section 2.1 of ANSI N45.2.5 - 1974 titled Planning: Planning requirements, when necessary, shall be incorporated into maintenance and modification procedures. 55

A 7) With regard to Section 2.2 of ANSI N45.2.5 - 1974 titled Procedures and Instructions: Procedures and instructions shall be implemented as set forth in Sections 1.7.1.5, 10 and 11 of the OQAP and by compliance with the Crystal River Unit 3 Technical Specifications and ANSI N18.7 as set forth in Table 1-3 of that Program in lieu of the requirements set forth here.

A,S-3 8) With regard to Section 2.3 of ANSI N45.2.5 - 1974 titled Results: These requirements are met by implementing Sections 1.7.1.10, 11 and 17 of the OQAP and by compliance with ANSI N18.7 as set forth in Table 1-3 of that Program in lieu of the requirements set forth here.

A 9) With regard to Section 2.5.2 of ANSI N45.2.5 - 1974 titled Calibration and Control: The first paragraph of this Section shall be met as set forth in Item 2 of FPC's commitment to Regulatory Guide 1.30 elsewhere in this Table.

N-1 10) With regard to Section 4.8 of ANSI N45.2.5 - 1974 titled In-Process Tests on Concrete and Reinforcing Steel: The seventh sentence specifies the location for taking pumped concrete samples. There may be instances when the pump line discharge is inaccessible for sampling and there may be other instances when, although samples could be taken, the technician would be in such a position that he could not satisfactorily conduct the tests. In these instances, FPC shall sample the concrete at the truck just before it enters the pump inlet hopper. When this technique is used, a correlation shall be established between truck discharge test results and pump line discharge test results.

N-8 11) With regard to Section 5.4 of ANSI N45.2.5 - 1974 titled High Strength Bolting: Item 1 of the second paragraph of this Section requires at least two threads to extend beyond the nut. FPC shall normally meet this criterion but may accept installations which have the point of the bolt flush with or outside of the face of the nut when completely installed if a direct-tension indicator is used to tighten the bolt.

A,S-3 12) With regard to Section 6.1 of ANSI N45.2.5 - 1974 titled General: Inspection and test requirements shall be implemented as defined in Sections 1.7.1.3, 10 and 11 of the OQAP and FPC's commitment to Section 5.2.7 of ANSI N18.7 as described in Table 1-3 of that Program in lieu of the requirements set forth here.

A 13) With regard to Section 7 of ANSI N45.2.5 - 1974 titled Records: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI-N45. 2.9 as specified in Table 1-3.

NRC Regulatory Guide 1.116 - "Quality Assurance Requirements for Installation, Inspection and Testing of Mechanical Equipment and Systems" (Rev. 0-R, 6/76) - Endorses ANSI N45.2.8 - 1975 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

G,N-7 1) For operational phase maintenance and modification activities which are comparable in nature and extent to similar activities conducted during the construction phase, FPC shall either control these activities under this OQAP or under an NRC accepted Construction QA Program. When this OQAP is used, FPC shall comply with the requirements of the Regulatory Position documented in this Guide in that QA programmatic/administrative requirements included therein (subject to the clarifications below) shall apply to these maintenance and modification activities even though such requirements may not have been in effect originally. Technical requirements associated with the maintenance and modifications shall be the original requirements or better (e.g., code requirements, material properties, design margins, manufacturing processes, and inspection requirements).

H 2) With regard to Section 1.1 of ANSI N45.2.8 - 1975 titled Scope: The last paragraph of this Section is not applicable to the operational phase. The applicable portions of the requirements of this Standard shall also be applied after fuel load; therefore, the last twenty-two words in the last sentence of the second paragraph under this Section are also not appropriate to the operational phase.

H,B,D 3) With regard to Section 1.2 of ANSI N45.2.8 - 1975 titled Applicability: The first sentence in this Section is not applicable to the operational phase. FPC shall comply with the third sentence in this Section with the clarifications that "important mechnical systems to be covered" is interpreted to mean those to which the OQAP applies, and "the extent of coverage" shall be defined by supervisory maintenace personnel by the way in which they implement the other requirements of this Standard.

D 4) With regard to Section 1.3 of ANSI N45.2.8 - 1975 titled Responsibility: This Section's requirements are met by the definitions for positions and the organizational responsibilities outlined in the Technical Specifications, Section1.7.1.1 of the OQAP, and the position descriptions for plant personnel.

A 5) With regard to Section 1.4 of ANSI N45.2.8 - 1975 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used: All definitions which are included In ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74.

D 6) With regard to Section 2.1 of ANSI N45.2.8 - 1975 titled Planning: Planning requirements, when necessary, shall be incorporated into maintenance and modification procedures.

NRC Regulatory Guide 1.116 (Continued)

55

A 7) With regard to Section 2.2 of ANSI N45.2.8 - 1975 titled Procedures and Instructions: Procedures and instructions shall be implemented as set forth in Sections 1.7.i.5, 10 and 11 of the OQAP and by compliance with the Crystal River Unit 3 Technical Specifications and ANSI N18.7 as set forth in Table 1-3 of that Program in lieu of the requirements set forth here.

A,S-3 8) With regard to Section 2.3 of ANSI N45.2.8 - 1975 titled Results: These requirements are met by implementing Sections 1.7.1.10, 11 and 17 of the OQAP and by compliance with ANSI N18.7 as set forth in Table 1-3 of that Program in lieu of the requirements set forth here.

A 9) With regard to Section 2.8.2 of ANSI N45.2.8 - 1975 titled Calibration and Control: The first paragraph of this Section shall be met as set forth in Item 2 of FPC's commitment to Regulatory Guide 1.30 elsewhere in this Table.

A,H,D 10) With regard to Section 2.9 of ANSI N45.2.8 - 1975 titled Prerequisites: Most of the items in this Section were written for construction activities. Maintenance and modification activities which are similar in nature and extent to construction activities shall be handled as set forth in Item 1 above. The portions of this Section which are considered applicable by responsible maintenance supervisory personnel shall be complied with as stated.

A,H,D 11) With regard to Section 3.1 of ANSI N45.2.8 - 1975 titled Pre-Installation Verification: (Including Subsections 3.1, 3.2, 3.3, 3.4 and 3.5.) Most of the items in this Section (and its Subsections) were written for construction activities. Maintenance and modification activities which are similar in nature and extent to construction activities shall be handled as set forth in Item 1 above. The portions of this Section (and its Subsections) which are considered applicable by responsible maintenance supervisory personnel shall be complied with as stated.

A,S-3 12) With regard to Sections 4.1 and 4.2 of ANSI N45.28 - 1975 titled, respectively, General and Process and Procedure Control: FPC meets these requirements by commitments to ANSI N18.7 as set forth elsewhere in this Table.

A 13) With regard to Section 4.4 of ANSI N45.2.8 - 1975 titled Inspections: The requirements of Section 4.4 shall be implemented as set forth in Section 1.7.1.10 of the OQAP. The inspection program shall incorporate, as applicable, those items listed in this Section.

B,D 14) With regard to Section 4.5 of ANSI N45.2.8 - 1975 titled Installation Checks: (Including Subsections 4.5.1 and 4.5.2.) The portions of this Section (and its Subsections) which are considered applicable by responsible maintenance supervisory personnel shall be complied with as stated. Such items shall be specified in appropriate maintenance or modification procedures.

NRC Regulatory Guide 1.116 (Continued)

H,A 15) With regard to Section 4.6 of ANSI N45.2.8 - 1975 titled Care of Items: FPC does not consider most of this Section to be applicable to the operational phase due to the relatively short period of time between installation and use. Consistent with commitments to ANSI N45.2.3 and ANSI N18.7 as given elsewhere in this Table, FPC shall implement appropriate housekeeping and preventive maintenance procedures to assure that all material which has been installed is appropriately protected and maintained. 55

A,S-3 16) With regard to Section 5.1 of ANSI N45.2.8 - 1975 titled General: The requirements of this Section shall be implemented as set forth in Sections 1.7.1.3 and 11 of the OQAP. The test program shall consider the elements outlined in this Section, where applicable, when developing test requirements for inclusion in maintenance and modification procedures. In some cases, testing requirements may be met by post-installation surveillance testing in lieu of a special post-installation test.

H,A 17) With regard to Sections 5.2, 5.3 and 5.4 of ANSI N45.2.8 - 1975 titled, respectively, Preoperational Testing, Cold Functional Tests, and Hot Functional Tests: Except for maintenance and modification activities which are similar in nature and extent to similar construction activities (which are handled as set forth in Item 1 above), the extensive testing program described in these Sections would not be applicable to operational phase activities. Where certain items are applicable, as determined by supervisory maintenance personnel, they shall be included in appropriate procedures or handled as described under Item 7 above.

A,S-3 18) With regard to Section 6 of ANSI N45.2.8 - 1975 titled Data Analysis and Evaluation: FPC shall process and analyze inspection and test data as set forth in Sections 1.7.1.10, 11 and 17 of the OQAP and our commitment to Sections 5.2.7 and 5.2.17 of ANSI N18.7 as described in Table 1-3 of the Program in lieu of the requirements of this Section.

A 19) With regard to Section 7 of ANSI N45.2.8 - 1975 titled Records: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI N45.2.9 as specified in Table 1-3.

NRC Regulatory Guide 1.123 - "Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants" (Rev. 1, 7/77) -Endorses ANSI N45.2.13 - 1976 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

S-9 1) Paragraph C.6.c of Reglatory Guide 1.123 (and Sections 10.2.a through f of ANSI N45.2.13 which it references) shall be implemented as originally written (i.e. with the verb "should" instead of the verb "shall").

C, S-9 2) Paragraph C.6.e of Regulatory Guide 1.123 (and Section 10.3.4 of ANSI N45.2.13 which it references) shall be implemented as originally written (i.e. with the verb "should" instead of the verb "shall"). This flexibility is necessary because FPC may not always be able to obtain agreement with a supplier. Since FPC retains the ultimate responsibility for performance of purchased equipment and since FPC maintains its own Nuclear Engineering Department, FPC should be allowed to exercise this management/engineering prerogative with respect to the final decision on post installation test requirements.

A 3) With regard to Section 1.3 of ANSI N45.2.13 - 1976 titled Definitions: With two exceptions (Procurement Document and Quality Assurance Program Requirements) definitions in this Standard which are not included in ANSI N45.2.10 shall be used; all definitions which are included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74. The two exceptions are defined in Table 1-3 under Regulatory Guide 1.74.

E 4) With regard to Section 1.2.2 of ANSI N45.2.13 - 1976 titled Purchaser's Responsibilities: Item c is one of the options which may be used by FPC to assure quality; however, any of the options given in 10 CFR 50, Appendix B, Criterion VII as implemented by Sections 1.7.1.4 and 7 of the OQAP may also be used.

F 5) With regard to Section 3.1 of ANSI N45.2.13 - 1976 titled Procurement Document Preparation, Review and Change Control: The phrase "the same degree of control" is stipulated to mean "equivalent level of review and approval." The changed document may not always be re-reviewed by the originator; however, at least an equivalent level of supervision shall review and approve any changes.

A, S-3 6) With regard to Section 3.4 of ANSI N45.2.13 - 1976 titled Procurement Document Control: FPC shall meet the requirements of Sections 1.7.1.4 and 7 of the OQAP in lieu of the requirements specified in this Section.

B 7) With regard to Section 5.3 of ANSI N45.2.13 - 1976 titled Preaward Evaluation: FPC shall comply with an alternate paragraph which reads: "Except in unusual circumstances (e.g. replacement parts are

needed to preclude the development of some unsafe or undesirable condition at Crystal River Unit 3), a preaward evaluation of the Supplier shall be performed as required by the OQAP." 55

S-4 8) With regard to Section 6.4 of ANSI N45.2.13 - 1976 titled Control of Changes in Items or Services: The phrase "the Quality Program" shall be inserted in lieu of "ANSI N45.2, Section 7."

N-9 9) With regard to Section 8.2 of ANSI N45.2.13 - 1976 titled Disposition: The third sentence of item b is revised to read: Nonconformances to the contractual procurement requirements or purchaser approved documents and which consist of one or more of the following shall be submitted to the purchaser for approval of the recommended disposition prior to shipment when the nonconformance could adversely affect the end use of a module* or shippable component relative to safety, interchangeability, operability, reliability, integrity, or maintainability:

a) Technical or material requirement is violated;

b) Requirement in supplier documents, which have been approved by the purchaser, is violated;

c) Nonconformance cannot be corrected by continuation of the original manufacturing process or by rework; and/or

d) The item does not conform to the original requirement even though the item can be restored to a condition such that the capability of the item to function is unimpaired.

* A module is an "assembled device, instrument, or piece of equipment identified by serial number or other identification code, having been evaluated by inspection and/or test for conformance to procurement requirements regarding end use. A shippable component is a part of a device, instrument, or piece of equipment which is shipped as an individual item and which has been evaluated by inspection and/or test for conformance to procurement requirements regarding end use".

A, S-3 10) With regard to Section 11 of ANSI N45.2.13 - 1976 titled Quality Assurance Records: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI N45.2.9 as specified in Table 1-3.

A, S-3 11) With regard to Section 12 of ANSI N45.2.13 - 1976 titled Audit of Procurement Program: The FPC audit program shall be implemented in accordance with and to meet the requirements of: ANSI N45.2.12 as endorsed in Table 1-3; Sections 1.7.1.16 and 18 of the OQAP, and the requirements of the Crystal River Unit 3 Technical Specifications.

NRC Regulatory Guide 1.144 - "Auditing of Quality Assurance Programs for Nuclear Power Plants" (Rev. 1, 9/80) - Endorses ANSI N45.2.12 - 1977. 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

A 1) Paragraph C.3.a of Regulatory Guide 1.144 (and Section 3.5.2 of ANSI N45.2.12 which it references) shall be implemented by meeting the audit requirements of the Crystal River Unit 3 Technical Specifications for audits under C.3.a(1). Audits under C.3.a(2) are not covered by this OQAP.

2) Paragraph C.3.b of Regulatory Guide 1.144 (and Section 3.5.2 of ANSI N45.2.12 which it references) shall be implemented as follows:

S-7 C.3.b(1) shall be met after adding another item for which external audits after contract award are not necessary: weld rod and other similar material which is produced under an ASME NCA3800 program. Such audits are not necessary, although they may be performed, if the material manufacturer retains ASME certification.

N-6 C.3.b(2) is replaced with the following: Each supplier is evaluated initially to determine the acceptability of his quality assurance program. If acceptable, the supplier is placed on the approved supplier list. In lieu of routinely conducting an annual reaudit, a formal evaluation of the supplier is performed each year to determine if a reaudit is required during the upcoming year. This evaluation must be formal, with the results documented and approved by responsible QA management; and it must consider pertinent factors such as the results of other audits, history of performance of product and/or purchased service, and effectiveness of implementation of the supplier's QA program.

N-6 This annual assessment shall consider the complexity of the component concerned and the degree of quality and process control required by the manufacturing effort. As a result of this evaluation, suppliers requiring a formal reaudit are identified. Regardless of the results of the evaluation, active suppliers (except those excluded under C.3.b(1) above) shall be reaudited every three years.

S-7, S-9 Inactive suppliers shall be evaluated prior to supplying safety-related items or services. An audit shall be conducted IF required to determine the acceptability of procured items or services (i.e. acceptability can not be determined by receipt inspection or one of the other methods allowable under 10 CFR 50, Appendix B, Criterion VII).

D 3) Paragraph C.4.a of Regulatory Guide 1.144 (and Section 3.5.3.3 of ANSI N45.2.12 which it references) shall be implemented with the clarification that the Director, Quality Programs or his designee shall determine which reorganizations or procedure revisions are "significant".

55

A, S-3 4) Paragraph C.7 of Regulatory Guide 1.144 (and Section 5.2 of ANSI N45.2.12 which it references) shall be implemented by maintaining records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI N45.2.9 as specified in Table 1-3. With respect to the additional audit records recommended in C.7, FPC may retain such records, but their retention shall not be considered mandatory.

A 5) With regard to Section 1.4 of ANSI N45.2.12 - 1977 titled Definitions: With one exception (Program Deficiencies) the definitions in this Standard which are not included in ANSI N45.2.10 shall be used as clarified in FPC's commitment to Regulatory Guide 1.74. The one excepted definition and a clarified definition (of audit) relevant to this Standard are defined in Table 1-3 under Regulatory Guide 1.74.

A 6) With regard to Section 2.2 of ANSI N45.2.12 - 1977 titled Personnel Qualification: FPC audit personnel shall be qualified to meet the requirements of Section 2 of ANSI N45.2.23 as endorsed in Table 1-3 and Sections 1.7.1.2 and 18 of the OQAP.

A 7) With regard to Section 2.3 (and Subsections 2.3.1 through 2.3.3) of ANSI N45.2.12 - 1977 titled Training: FPC audit personnel shall be trained as necessary to meet the requirements of Sections 2.2 and 2.3.3 of ANSI N45.2.23 as endorsed in Table 1-3 and Sections 1.7.1.2 and 18 of the OQAP.

A 8) With regard to Section 2.4 of ANSI N45.2.12 - 1977 titled Maintenance of Proficiency: FPC audit personnel shall maintain their proficiency by meeting the requirements of Section 3.2 of ANSI N45.2.23 as endorsed in Table 1-3 and Sections 1.7.1.2 and 18 of the OQAP.

C, E, D 9) With regard to Section 3.3 of ANSI N45.2.12 - 1977 titled Essential Elements of the Audit System: FPC shall comply with Subsection 3.3.5 as it was originally written (Subsection 3.2.5 in ANSI N45.2.12, Draft 3, Revision 4): "Provisions for reporting on the effectiveness of the quality assurance program to the responsible management." For auditing and audited organizations within FPC, "effectiveness of the quality assurance program" is reported to responsible management by meeting the requirements of the Crystal River Unit 3 Technical Specifications and Sections 1.7.1.1, 2, 16 and 18 of the OQAP. For audited organizations outside (e.g. vendors, suppliers) of FPC, transmittal of the audit report shall be deemed to meet the requirements of Subsection 3.3.5 "for reporting on the effectiveness of the quality assurance program to the responsible management".

D Subsection 3.3.6 requirements are considered to be fulfilled by compliance with the organization and reporting measures outlined in the OQAP and the Technical Specifications for Crystal River Unit 3.

Subsection 3.3.7 requires verification of effective corrective action on a "timely basis." Timely basis is interpreted to mean within the

framework or period of time for completion of corrective action that is accepted by the quality organization. Each finding requires response and a corrective action completion date; these dates are subject to revision (with the approval of the quality organization) and must be escalated to higher authority when there is a disagreement between the audited and the auditing organization on what constitutes "timely corrective action". 55

F 10) With regard to Section 3.5 of ANSI N45.2.12 - 1977 titled Scheduling: Subsection 3.5.3.1 is interpreted to mean that FPC may procedurally control qualification of a contractor's or supplier's quality assurance program prior to awarding a contract or purchase order by means other than audit.

F, C 11) With regard to Section 4.3.1 of ANSI N45.2.12 - 1977 titled Pre-Audit Conference: FPC shall comply with requirements of this Section by inserting the word "Normally" at the beginning of the first sentence. This clarification is required because, in the case of certain unannounced audits or audits of a particular operation or work activity, a pre-audit conference might interfere with the activity or with the spontaneity of the operation or activity being audited. In other cases, persons who should be present at a pre-audit conference may not always be available: Such lack of availability should not be an impediment to beginning an audit. Even in the above examples, which are not intended to be all inclusive, the material set forth in Section 4.3.1 is normally covered during the course of the audit.

12) With regard to Section 4.3.2 of ANSI N45.2.12 - 1977 titled Audit Process:

F, C a) Subsection 4.3.2.2 could be interpreted to limit audits to the review of only objective evidence; sometimes and for some program elements, no objective evidence may be available. FPC shall comply with an alternate sentence which reads: "When available, objective evidence shall be examined for compliance with Quality Program requirements. If subjective evidence is used (e.g. personal interviews, direct observations by the auditor), then the audit report must indicate how the evidence was obtained."

B, C b) Subsection 4.3.2.4 is modified as follows to take into account the fact that some nonconformances are virtually "obvious" with respect to the needed corrective action: "When a nonconformance or Quality Program deficiency is identified as a result of an audit, unless the apparent cause, extent, and corrective action are readily evident, further investigation shall be conducted by the audited organization in an effort to identify the cause and effect and to determine the extent of the corrective action required."

F, S-3 c) Subsection 4.3.2.5 contains a recommendation which is clarified with the definition of "acknowledged by a member of the audited organization" to mean that "a member of the audited organization has been informed of the findings." Agreement or disagreement with a finding may be expressed in the response from the audited organization. 55

F, C d) Subsection 4.3.2.6 is modified as follows to account for the fact that immediate notification is not always possible: "Conditions requiring immediate corrective action (i.e. those which are so severe that any delay would be undesirable) shall be reported as soon as practical to management of the audited organization."

F, S-7 13) With regard to Section 4.3.3 of ANSI N45.2.12 - 1977 titled Post-Audit Conference: FPC shall substitute and comply with the following paragraph: "For all external audits, a post-audit conference shall be held with management of the audited organization to present audit findings and clarify misunderstandings; where no adverse findings exist, this conference may be waived by management of the audited organization: Such waiver shall be documented in the audit report. Unless unusual operating or maintenance conditions preclude attendance by appropriate managers/supervisors, a post-audit conference shall be held with managers/supervisors for all internal audits for the same reasons as above. Again, if there are no adverse findings, the management of the internal audited organization may waive the post-audit conference: Such waiver shall be documented in the audit report."

14) With regard to Section 4.4 of ANSI N45.2.12 - 1977 titled Reporting:

F, C a) This Section states that the audit report shall be signed by the audit team leader; this is not always the most expeditious route to take to assure that the audit report is issued as soon as practical. FPC shall comply with Section 4.4 as clarified in the opening: "An audit report, which shall be signed by the audit team leader, or his supervisor in his absence, shall provide:" In cases where the audit report is not signed by the Lead Auditor due to his absence, one record copy of the report must be signed by the Lead Auditor upon his return. The report shall not require the Lead Auditor's review/concurrence/signature if the Lead Auditor is no longer employed by FPC at the time the audit report is issued.

S-7 b) FPC shall comply with Subsection 4.4.3 clarified to read: "Supervisory level personnel with whom significant discussions were held during the course of pre-audit (where conducted), audit, and post-audit (where conducted) activities."

E c) Audit reports may not necessarily contain an evaluation statement regarding the effectiveness of the quality assurance program elements which were audited, as required by Subsection 4.4.4, but they shall provide a summary of the audited areas and the results.

d) Subsection 4.4.6 requires audit reports to include recommendations for corrective actions; FPC may choose not to comply with this requirement. Instead, FPC auditors/lead auditors are required to document all adverse findings on Audit Finding Reports (AFRs). The procedure for processing AFRs allows the auditor/lead auditor to document actions which are considered necessary to correct the finding; the auditor/lead auditor may also document actions which are considered unacceptable for correcting the finding: The AFR with these "Auditor Recommendations" is then transmitted to the audited organization. In addition, the auditor/lead auditor is required to review the response to the AFR and determine if it is acceptable. Any disagreements must be escalated to higher management for resolution via the Nonconformance Report (NCR) process. 55

I e) The last paragraph in Section 4.4 deals with distribution of audit reports. FPC shall comply with these requirements after substituting the following for the last sentence: "The audit report shall be issued within thirty working days after the last day of the audit."

E, I, C 15) With regard to Section 4.5.1 of ANSI N45.2.12 - 1977 titled By Audited Organization: FPC shall comply with the following clarification of this Section: "Management of the audited organization or activity shall review and investigate all adverse audit findings, as necessary, (e.g. where the cause is not already known or another organization has not already investigated and found the cause, etc.) to determine and schedule appropriate corrective action (which includes action to prevent recurrence). They shall respond, in writing, within thirty working days after the date of issuance of the audit report. The response shall clearly state the corrective action taken or planned to prevent recurrence and the results of the investigation, if conducted. In the event that corrective action is not completed by the time the response is submitted, the audited organization's response shall include a scheduled date for completion of planned corrective action: A followup response shall be provided stating the corrective action taken and the date that the action was completed. If corrective actions are verified as satisfactorily completed by the quality organization prior to the scheduled completion date, no followup response is required. The audited organization shall take appropriate action to assure that corrective action is accomplished as scheduled. Either the Director, Quality Programs or the onsite QA Supervisor may waive the requirement for a supplementary response.

A, S-3 16) With regard to Section 5.1 of ANSI N45.2.12 - 1977 titled General: FPC shall maintain records in accordance with and to meet the requirements of Section 1.7.1.17 of the OQAP and ANSI N45.2.9 as specified in Table 1-3. (See also Item 4 above.)

NRC Regulatory Guide 1.146 - "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants" (Rev. 0, 8/80) - Endorses ANSI N45.2.23 - 1978 55

The Quality Program (OQAP) complies with the requirements of this Guide with the following clarifications:

A 1) With regard to Section 1.4 of ANSI N45.2.3 - 1978 titled Definitions: Definitions in this Standard which are not included in ANSI N45.2.10 shall be used; "Audit" which is included in ANSI N45.2.10 shall be used as clarified in FPC's comments to Regulatory Guide 1.74.

S-4 2) With regard to Section 2.2 of ANSI N45.2.23 - 1978 titled Qualification of Auditors: Subsection 2.2.1 references an ANSI B45.2 (presumed to be ANSI N45.2); therefore, FPC shall comply with an alternate Subsection 2.2.1 which reads: "Orientation to provide a working knowledge and understanding of the OQAP, including the ANSI Standards and Regulatory Guides included in Table 1-3 of that Program, and FPC's procedures for conducting audits and reporting results."

F 3) With regard to Section 3.2 of ANSI N45.2.23 - 1978 titled Maintenance of Proficiency: FPC shall comply with the requirements of this Section by defining "annual assessment" as one which takes place every 12 + or - 3 months and which may use either the initial date of certification or the calendar year in which an auditor/lead auditor was certified as basis for determining when an annual assessment is due.

B, F 4) With regard to Section 4.1 of ANSI N45.2.23 - 1978 titled Organizational Responsibility: FPC shall comply with this Section with the substitution of the following sentence in place of the last sentence in the Section. "The Director, Quality Programs, Audit Supervisor, or Lead Auditor shall, prior to commencing the audit, assign personnel who collectively have experience or training commensurate with the scope, complexity, or special nature of the activities to be audited."

S-7 5) With regard to Section 5.3 of ANSI N45.2.23 - 1978 titled Updating of Lead Auditors' Records: FPC shall substitute the following sentence for this Section: "Records for each Lead Auditor shall be maintained and updated during the period of the annual management assessment as defined in Section 3.2 (as clarified)."

A, S-3 6) With regard to Section 5.4 of ANSI N45.2.23 - 1978 titled Records Retention: FPC shall substitute the following sentence for this Section: "Qualification records shall be generated and maintained as required by Sections 1.7.1.2, 17, and 18 of the OQAP and by commitment to ANSI N45.2.9 as set forth in Table 1-3 of that Program."

ATTACHMENT B

Reasons and Rationale for Changes to the FPC Quality Program Description

Florida Power Corporation (FPC) insists on quality in its management and operation of Crystal River Unit 3. This commitment to quality is represented by FPC's Quality Program (Operational).

This Quality Program has undergone a detailed and critical review by FPC management. This review included comparison of the Quality Program description with 10 CFR 50 Appendix B, the NRC's Standard Review Plan and the Regulatory Guides and ANSI Standards to which FPC is committed. Based on this review, we conclude that the current Quality Program description continues to satisfy the criteria of 10 CFR 50, Appendix B and the Quality Program description commitments previously accepted by the NRC.

Changes to the Quality Program description which have been made are constructive in nature and do not reduce the effectiveness of the program. Editorial changes have been made. Provisions which serve as bases for compliance with the requirements of Appendix B or which represent additional/upgraded FPC commitments to Regulatory Guides and ANSI Standards have been added.

Changes have been made to establish a single point of reference and thereby facilitate the understanding, tracking and control of requirements. Towards this purpose, changes have been made to eliminate redundancy within the Quality Program description; to reference the Technical Specifications where it establishes program requirements; and, to consolidate the description of FPC's commitment to Regulatory Guides and ANSI Standards in Table 1-3.

Other changes have been made to eliminate detail that is far in excess of that called for in the criteria of Appendix B. This level of detail is more properly contained in implementing documents. Deletion of this detail does not result in a reduction in requirements.

All changes which have been made to the Quality Program description previously accepted by the NRC are marked in the current Quality Program description (Attachment A) with a vertical line in the margin. For the purpose of this submittal the change lines are annotated to correspond with additional discussion below supporting the acceptability of the changes. Change lines associated with editorial changes are not annotated unless the editorial changes occur simultaneously with other changes.

Editorial Changes

Editorial changes made to the Quality Program description include correction of spelling and punctuation; revision of section and paragraph numbering; modification of verb tense to reflect implementation of the program; and, deletion of references to the preoperational Quality Program description which are not applicable to the Quality Program (Operational). The word "all" has been

deleted where it does not specifically and correctly contribute to the extent or scope of a requirement. The justification in these cases is that it may be interpreted to preclude acceptable equivalent methods or include activities not intended to be subject to the Quality Program. FPC's Quality Program is well defined and the use of "all" in most cases is unnecessary.

Editorial changes also include the deletion of specific position/organization titles in situations where the requirements or activities discussed could very well apply to other positions/organizations. The Quality Program description includes the requirement that FPC has established the functional responsibilities and authorities of positions/organizations involved in the Quality Program. FPC reserves the right to control these assignments within the requirements of the program.

Generic Changes

Certain changes or portions of changes are common and occur throughout the Quality Program description.

The statement of requirements for audits to assure compliance with the Quality Program has been deleted from most sections. These are redundant statements to the requirements of the Audit program as described in Section I.7.I.I8. Such changes are marked "audit".

All references to Regulatory Guides and ANSI Standards include the reference to Table I-3 as part of establishing a single point of reference. Such changes are marked "table". The endorsement of an ANSI Standard includes the endorsement of the associated Regulatory Guide. The justification for changes associated with Table I-3 is provided in the discussion of Change 55.

Other Changes (Numbered)

1. The previously accepted description of FPC's Quality Program for the operational phase of Crystal River Unit 3, was in FSAR Section I.7 along with the description of the Quality Program for all aspects of the preoperational phase. In 1982 the organization of the FSAR was modified such that the Quality Program applicable to the preoperational phase is in FSAR Section I.6 and the Quality Program for the operational phase is in FSAR Section I.7. A statement has been added to the introduction to indicate that Section I.7 contains the description of the FPC Quality Program for the operational phase.

   The reference to position descriptions in Section I.7.5.I.I has been deleted since these descriptions are now provided in Section I.7.I.I, Organization. The reference to individual qualifications has been moved to Section I.7.I.I.

2. The remainder of the statements in the previously accepted introduction have been deleted based on our efforts to reduce redundancy and organize the Quality Program description in line with Appendix B and the SRP. The statements regarding document controls and Quality Program training were deleted since these programs are described in Sections I.7.I.6 and I.7.I.2 respectively. The statements regarding FPC's responsibility for the

Quality Program, the term of responsibility, and the performance of maintenance or modifications have been moved to Sections I.7.I.I, I.7.I.2, and I.7.I.3 respectively.

3. The reference to organization responsibility descriptions elsewhere in Section I.7 has been deleted since these responsibilities are now described in this section. The reference to Appendix I2A for personnel qualifications and the statement of FPC's responsibility for the Quality Program have been added (see changes I and 2).

   The statement that FPC personnel implement the Quality Program in the same manner as FPC requires of its contractors has been deleted. This statement stems from a philosophy applicable during the preoperational phase and not the operational phase. FPC personnel implement the Quality Program described in FSAR Section I.7. Quality assurance related to contractor activities is controlled as described in Sections I.7.I.4 and I.7.I.7.

4. Discussion of the Quality Program staff has been deleted. The responsibilities of this staff are addressed in Section I.7.3.

5. The statement regarding qualification requirements for positions responsible for directing and managing the Quality Program has been deleted. Qualification requirements applicable to the quality assurance organization (both onsite and offsite) are specified in Table I-3, Regulatory Guides I.8 and I.146, and qualifications for the positions listed in this section are summarized in Appendix I2A of the FSAR.

   The paragraphs regarding the responsibilities of Reactor Operators, Shift Supervisors and the Operations Superintendent contain requirements which are more appropriately stated in the implementing documents of the Quality Program. FPC's Administrative Instruction AI-500, Conduct of Operations, and its referenced implementing procedures contain the requirements of these paragraphs including the responsibilities and authorities for shutdown and restart of the reactor (including shutdown when RPS setpoints are exceeded and automatic shutdown does not occur); the responsibility to believe and respond to instrument indications and adhere to Technical Specifications; and the responsibility for review of routine operations. Based on the above and FPC's continuing commitment to Regulatory Guide I.33 as specified in Table I-3, the subject FSAR paragraphs have been deleted.

6. The summary of functional responsibilities and authorities has been added so that Section I.7 presents a complete description of the FPC Quality Program for the operational phase. The FPC organization continues to provide the positions performing quality assurance functions with the authority, independence and access to management necessary to assure effective implementation of the Quality Program.

7. The definition of the operational phase has been added (see change 2).

8. The statement that the Quality Program meets the requirements of 10 CFR 50, Appendix B has been added. This statement, when coupled with the statement that the program meets the requirements of Regulatory Guides and ANSI Standards as defined in Table 1-3 (see change 15), presents the regulatory requirements which serve as a basis for the Quality Program. The sentence regarding compliance with the program has been modified to correctly relate this compliance with persons performing quality activities. The statement regarding records and test data has been deleted since the requirements for records and test data are specified, as appropriate, in other sections (e.g. 1.7.1.9, 1.7.1.10, 1.7.1.11, and 1.7.1.17).

9. The requirement to train and qualify personnel in the principles and techniques of the activity being performed has been modified to indicate that personnel will be trained and qualified in the activity being performed. Specific training and qualification requirements for positions performing quality-related activities are specified elsewhere such as in Table 1-3 and the Technical Specifications. There is no apparent benefit to summarizing two aspects, "principles and techniques", of training and qualification programs in this statement. Furthermore a broad but improper interpretation of "principles and techniques" could exceed the actual requirements of approved training and qualification programs. Therefore "principles and techniques" has been deleted.

10. The statement of FPC's commitment to housekeeping and cleanliness controls, including the applicable ANSI Standards, has been added.

11. A summary of quality control related responsibilities and requirements has been added to the Quality Program section. This summary as well as other elements of the Quality Program are used to justify deleting the separate discussion of quality controls from the previously accepted Quality Program description (see change 51).

12. A statement has been added to identify, by reference, the structures, systems, and components covered by the Quality Program. The statement of applicable structures, systems, and components in FSAR Section 1.6.4 (preoperational phase) is unchanged and is included in the Quality Program for the operational phase by the appropriate reference. To supplement this general description of equipment covered by the program we have added a reference to our "Safety Listing" and indicated that we may apply the Quality Program requirements to other equipment and activities.

13. Statements have been added to indicate some of the methods used by FPC to review the status and adequacy of its Quality Program. This is in agreement with the organization and requirements of 10 CFR 50 Appendix B.

14. A statement has been added to allow a period of time between a change to the Quality Program description and the necessary changes in implementing procedures. This period of time will permit the revision of appropriate implementing procedures in a controlled and effective manner such that the revisions are truely responsive to the change in Quality Program requirements.

15. A specific reference to FSAR Section 1.7.2, Program Commitment, and Table 1-3, which define FPC's Quality Program commitments to Regulatory Guides and ANSI Standards, has been added in place of the general reference to applicable Regulatory Guides and ANSI Standards.

16. The reference to ANSI N18.7-1976, Section 5.2.7.2 regarding design activities associated with modifications, has been revised to ANSI N45.2.11. This provides a direct reference to the controlling Standard. The general discussion of engineering reviews and the establishment of modification packages for both safety related and non safety related modifications does not enhance or modify the commitment to ANSI N45.2.11. Section 7) of Table 1-3, Regulatory Guide 1.64 addresses timing of design verifications. In addition the discussion of non safety related modifications is beyond the scope of this Quality Program description which demonstrates compliance with the requirements of 10 CFR 50 Appendix B. While it is true that, in general, modifications undergo an engineering review and for non safety related modifications, this review may take place after the fact, deletion of these statements from the Quality Program description does not represent a reduction in commitment.

17. Statements regarding the performance of maintenance or modifications have been added (see change 2).

18. FPC is committed to the requirements of ANSI N45.2.13, as defined in Table 1-3. Section 3.3 of that Standard contains the requirements for procurement document review. By meeting the requirements of ANSI N45.2.13, FPC assures that all discrepancies are resolved prior to purchase. Therefore the redundant statement to this effect has been deleted.

19. The requirement to review suppliers' quality programs prior to implementation more correctly belongs in Section 1.7.1.7, Control of Purchased Material, Equipment, and Services. Therefore this statement has been deleted (see change 28).

20& 21. The extensive listings of examples of basic technical requirements and documentation requirements, which may be contained in procurement documents, as well as details regarding the evaluation and selection of suppliers are more appropriately stated in the implementing documents of the Quality Program and have been deleted. These examples and details are contained in the applicable sections of FPC's Nuclear Procurement and Storage Manual. FPC's commitment to ANSI N45.2.13 assures that these deletions do not represent a reduction in commitments.

22. The statements regarding the use of procedures have been consolidated. The control of nonconformances is discussed in Section 1.7.1.15. Therefore this redundant statement has been deleted.

23. The requirement that procedures be strictly adhered to in all matters relating to nuclear safety could be improperly interpreted as a requirement to always have procedures present and followed step-by-step and,

therefore, has been modified. As now stated, FPC has identified tasks during which written procedures are present and followed step-by-step. These tasks are identified in Administrative Instruction AI-500 and implementing procedures. FPC requires adherence to procedures, in all matters related to nuclear safety, consistent with the requirements of ANSI N18.7 as defined in Table I-3.

24. The statements and paragraphs regarding the use of checkoff lists, data collection sheets, emergency and abnormal procedures and other procedures contain details which are more appropriately stated in implementing documents of the Quality Program. FPC's Administrative Instructions AI-400 and AI-500 and implementing procedures contain the requirements for use of the subject documents. FPC's commitment to ANSI N18.7 assures that these deletions do not represent a reduction in commitments.

    Temporary changes to procedures are controlled in accordance with the requirements of Section 6 of the Technical Specifications. Therefore the statement regarding this subject has been deleted.

    The statement regarding housekeeping and cleanliness controls has been added to Section I.7.I.2.

25. The description of documents subject to FPC's document control system has been more broadly and accurately stated as "documents which prescribe activities affecting quality". The requirement that records are entered into the files in accordance with written procedures is stated in Section I.7.I.17.

26. FPC wishes to reserve the management flexibility to issue instructions, procedures, and drawings and revisions thereto which do not necessarily appear on a master list. Also the capability must exist to revise documents which are contained on lists, prior to updating the lists, as long as the current revision is identified to affected personnel. All documents and revisions subject to FPC's document control system are controlled per Section I.7.I.6(4), (5) and (7) which assures that the current revision of instructions, procedures and drawings is used for activities affecting quality.

27. The control of procedures per Regulatory Guide I.33 has been added to indicate additional commitments per Table I-3 and the Technical Specifications.

28. The statement regarding evaluation of suppliers' quality programs has been added (see change 19). The reference to ANSI N45.2.13 is appropriate and has been added.

29. The methods available to FPC for assuring that quality requirements are met have been more accurately stated as source inspection, receipt inspection, or document review as appropriate. This is consistent with FPC's commitment to ANSI N18.7 and ANSI N45.2.13.

30. An introduction indicating that FPC has established measures for the identification and control of materials, parts, and components has been added.

31. "Subassemblies" is not defined in ANSI N18.7 or ANSI N45.2.10. "Assembly" is defined in ANSI N45.2.10 as a combination of subassemblies or components, or both, fitted together to form a unit. As used in this FSAR statement, partially fabricated assemblies represents identification and control requirements to the subassembly and component level. Therefore use of defined terms represents an adequate level of equipment identification and control.

32. Chemical cleaning has been added as an example of the types of special processes subject to controls by FPC.

33. Approved written procedures specify the documentation requirements and applicable forms for special processes.

34. FPC's qualification requirements for inspection personnel are based on the requirements of applicable Regulatory Guides, corresponding ANSI Standards and the Crystal River Unit 3 Technical Specifications. Regulatory Guides 1.8, 1.58 and 1.146, as described in Table 1-3, and Section 6 of the Technical Specifications contain the complete statement of FPC's qualification requirements for inspection personnel. In addition, Table 1-3 discusses the bases for these requirements.

35. Statements regarding the use of process monitoring, alone and in combination with inspection, and the use of inspection hold points have been added to indicate aspects of FPC's Quality Program which serve as bases for compliance with 10 CFR 50 Appendix B. The statement regarding inspections performed after initial inspections is ambiguous and has been deleted. FPC's commitment to the requirments of ANSI N18.7, section 5.2.17 assures that inspections of modifications and maintenance adequately consider the initial inspection requirements.

36. "Operational tests" has been added to reflect that Crystal River Unit 3 is in the operational phase.

37. A statement regarding the evaluation of test results has been added to indicate an aspect of FPC's Quality Program which serves as a basis for compliance with 10 CFR 50 Appendix B.

38. FPC has expanded the references to applicable Standards and the Technical Specifications to provide a complete reference. The bases for other changes to this introduction are discussed earlier in those paragraphs which address editorial and generic type changes.

39. FPC desires to maintain a management option to accept calibration "prior to use" of that measurement and test equipment for which this is an effective means of control. Such equipment might include that used infrequently or at non-periodic intervals. This option continues to assure that calibrated measurement and test equipment is used.

40. Records requirements have been deleted as a highlighted aspect of FPC's measurement and test equipment controls program since recordkeeping requirements are specified in Section 1.7.1.17, the Technical Specifications and applicable ANSI Standards referenced in the introduction to Section 1.7.1.17.

41. Specific exceptions to ANSI N45.2.2 have been replaced by reference to this Standard as defined in Table 1-3. Clarification of specific aspects of this Standard are discussed in change 55.

42. Reinspection as originally inspected or at least equal to the original inspection method is too broad a statement of the requirement. FPC wishes to maintain the flexibility to specify inspection requirements which adequately assure that original design requirements are met while taking into consideration the extent of the rework or repair. The modified statement of this program provison meets the requirements of ANSI N18.7 Section 5.2.14.

43. A provision of FPC's program regarding the identification and correction of conditions adverse to quality has been added to represent the basis for FPC's compliance with 10 CFR 50 Appendix B.

44. "Training records" has been added as an example of quality assurance records to represent FPC's commitment to treat training records as such.

45. Reference to ANSI N45.2.9 has replaced N18.7, Section 5.2.12 to present a direct reference to the controlling Standard.

46. This statement has been broadened to address those quality assurance records maintained as single copy records. Furthermore, the duplicate set of information maintained by FPC does not have to be microfilmed to satisfy the intent of maintaining a duplicate set of records. FPC commits to the requirements of ANSI N45.2.9, as defined in Table 1-3, for storage of quality assurance records.

47. The discussion regarding the review of audit results has been deleted here because this review is adequately addressed in statements added to Sections 1.7.1.1 (change 6) and 1.7.1.2 (change 13); in FPC's commitment to Regulatory Guide 1.144 as described in Table 1-3; and in provision 3 of this section.

48. FPC wishes to retain management flexibility in determining when reauditing is necessary. The criteria contained in this modified statement will be used in making such determinations. This position complies with the requirements of ANSI N18.7 Section 4.2

49. The Technical Specifications contain the requirements for audit frequency and this statement has been modified accordingly.

50. This statement has been added to reflect FPC's commitment to Regulatory Guide 1.146.

51. The statement that the issue date of a Standard committed to takes presedence over ANSI Standards referenced in ANSI N18.7 is repetitious when compared to the balance of Section I.7.2 and Table I-3. Therefore it has been deleted.

The discussion of quality control has been deleted. The requirements in this discussion are stated elsewhere in the Quality Program description including management responsibilities (Section I.7.1.1), Plant Review Committee responsibilities (I.7.1.1), applicable equipment (Section I.7.1.2), indoctrination and training program (Section I.7.1.2), the independence of personnel performing the quality control function (Section I.7.1.2) and performance in accordance with approved written procedures (Section I.7.1.2 and I.7.1.5). As an element of FPC's Quality Program the quality control function is subject to requirements of the Quality Program. Therefore deletion of this discussion does not represent a reduction in FPC's previously accepted commitments or an exception to the requirements of 10 CFR 50 Appendix B.

52. This section has been expanded to indicate that others, in addition to the Quality Programs Department staff, perform quality assurance activities. The requirement that the Quality Programs Department maintain records of audit results has been moved to Section I.7.1.18.

53. The responsibilities and authorities of the NGRC in performing the independent review function are described in Section I.7.1.1.

54. FPC has retained the definitions of "Quality Control" and "Quality Activity" (previously "Quality Function") from the accepted FSAR description of the Quality Program. FPC has defined the other terms used in its Quality Program by reference to applicable Standards as defined in Table I-3. This provides a means of assurance that each term will have but one definition.

55. Justification and Rationale for Clarifications to Standards Listed in Table I-3 of the Crystal River #3 FSAR.

During our review of the various Standards and Regulatory Guides endorsed by FPC, certain requirements were found to need clarification in order to ensure that the Quality Program could be readily understood and implemented. These clarifications generally resulted from generic concerns or were based on specific circumstances at Crystal River Unit 3. The specific line of reasoning or rationale which prompted each of our clarifications is listed below. Items A through I are generic; items S-1 through S-9 are based on specific circumstances at Crystal River Unit 3; and items NRC-1 through NRC-11 are based upon published USNRC QA positions or statements.

In the left hand margin beside each clarification in Table I-3, a designation has been inserted. This designation corresponds to the generic or specific justification listed below. In some instances, a particular clarification was made for several reasons. In these cases, the designation for each of the major contributing reasons has been indicated.

The fundamental concept behind all of the clarifications is this: An easily understood, workable program has the highest probability for successful implementation. The FPC commitment to quality depends upon each person within the nuclear function knowing and performing that portion of the Quality Program for which he or she is responsible. Such a commitment demands personal involvement by our employees, but it also requires an enlightened management team with a Quality Program dynamic enough to allow change when experience indicates that there is a better way of doing business. Thus each of our changes has been made in order to make our Quality Program relevant to those who implement it, based on our own or the experience of other utilities within the nuclear industry.

On the basis that all of the clarifications are made within the constraints of 10 CFR 50, Appendix B; and all that are applicable to the operational phase provide an equivalent alternate to that specified in the original commitment; FPC concludes that: (1) the changes do not reduce the commitments in the program description previously accepted by the NRC (per 10 CFR 50.54(a)(3)); and (2) the revised program incorporating the changes continues to satisfy the criteria of Appendix B (per 10 CFR 50.54(a)(3)(ii)).

Generic

A. A Single Point of Reference

Most of the QA Standards were developed, initially, on a concurrent basis. Thus each covered procedures, records, qualifications of personnel, audits and definitions. Specific standards were later issued which covered these areas in detail. In other cases, subsequent NRC accepted documents (Standard Technical Specifications (STS), Security Plans, TMI Action Plan items) superseded items in a particular Standard.

To comply with our general philosophy of an "understandable" program, FPC has opted for a single point of reference where we will define how an activity is to be accomplished. This also requires that the selected point be the most logical. For example, commitments relative to records will be in the records standard; audits in the audit standard; definitions in the definition standard. Since Technical Specifications are the most widely known and accepted "standard" during the operational phase, this location always received priority.

B. Broad Requirements (Too "General" or "All Encompassing")

Certain paragraphs or sections within some Standards could be interpreted to require a specific practice under all conditions since there is no delimiting language within the requirement statement. As an example, preplanning of maintenance is a desirable requirement, but not in an emergency where time does not permit such a deliberate approach. In these cases, FPC has stated which conditions

are expected or has added limits to the requirement statement. In all cases FPC has preserved the practical intent of the Standard.

C. Clarification Contains Justification

In some cases, the logic or rationale is included within the clarification itself. This was done to provide FPC personnel (who would not normally see the justification sent to the USNRC) an insight -to ensure consistent application- by giving the underlying principal behind the actual words or phrases used.

D. Do Not Specify "How", Only "What"

In many instances, the Standards give requirements for "what" must be accomplished but do not specify "how": Generally these instances were not clarified. However in some cases we have documented our approach to give guidance to our personnel on how FPC management wishes the activity to be accomplished.

E. Excessively Restrictive or Prescriptive

Some requirements were written in such a manner that only one of many equally acceptable methods is allowed. In these cases, FPC wishes to retain the management flexibility to comply with the regulations in other acceptable ways. Clarifying language was used either in place of or to modify the Standards' requirements.

F. Flexibility Possibly Inhibited

These cases are similar to those described under Item E above except that the statement within the Standard would be excessively restrictive or prescriptive only with one, very narrow, interpretation of the language. FPC defined the word or words which could be misconstrued to preclude such an interpretation and to clearly express our intention for compliance.

G. Generic Clarification (Similar to that in USNRC Regulatory Guides)

This clarification applies to all FPC commitments in Table I-3 and is based on language in several USNRC Regulatory Guides and covers two aspects: First, FPC commits -as clarified- to a particular Standard, but unless a specific commitment is made elsewhere, FPC does NOT commit to documents referenced within or appended to the Standard; Second, FPC commits to construction type Standards (or certain construction type sections within a Standard) only for construction type activities. The words "similar in nature and extent to construction activities" embrace the USNRC's interpretation of applicability in these areas.

H. Have No Applicability to FPC Operational Activities

A small portion of the requirement statements in the Standards have no applicability to quality, safety, legality or efficiency of our operations. We have so stated in Table I-3.

I. Increasing Scope

This classification is used primarily with definitions. In some cases, the definitions used in Standards are too restrictive to allow the variety of documents and activities which our personnel commonly group under these designations. In these cases, FPC has clearly defined what is included in our scope of work or word definition.

Crystal River Specific

S-1 Loss Prevention

This clarification is taken for ANSI N45.2.2-1972. The "protection" requirements for Level D items specified in the Standard deal with prevention of loss, not maintenance of quality. FPC may choose to accept a risk of loss in lieu of providing a protection system for Level D items. Normally such items are stored within a fenced-in portion of the Crystal River site, but FPC wishes to retain the option for storage at other locations.

S-2 Personnel Qualifications

This clarification deals with the qualification of personnel or the method of documenting the qualifications of personnel. FPC is committed to a program which always uses qualified personnel, but also to one which recognizes that individual talent is not always directly related to completion of academic training. FPC management uses the method, described each time this justification is used, to assure itself that appropriately trained/qualified personnel are used.

S-3 Comparable FPC Program

This clarification is used whenever FPC has a program which is established to meet the intent of the program/activity specified in the Regulatory Guide or Standard. FPC uses its program to meet the one specified.

S-4 ANSI N45.2

Most of the Standards are construction standards and reference ANSI N45.2. Since ANSI N45.2 has been replaced by ANSI N18.7 for the

operational phase, this clarification is invoked each time ANSI N45.2 is used.

S-5 Requirements on Suppliers

Some Standards/Regulatory Guides require that requirements be imposed upon FPC's suppliers. In each of these cases, FPC has specified that its procurement process shall impose these requirements when necessary to assure quality consistent with the importance of the item or service to nuclear safety.

S-6 Updating to Later Requirements

In the cases where this designation is used, FPC wishes to upgrade its Quality Program to later consensus Standards which have been developed and published by the nuclear industry but which have not yet been endorsed by the NRC in a published Regulatory Guide. Since the Standard Review Plan (NUREG-0800) requires either a commitment to published Regulatory Guides or acceptable alternate methods for meeting a requirement, FPC has selected only specific sections rather than committing in total to an unendorsed Standard. The specific sections of the Standards are referenced within the clarification.

S-7 Exercising of a Management Prerogative

Clarifications in this category are simple statements of the management prerogative that FPC intends to exercise. The actions described are usually not explicitly addressed in the Standard. However without such a clarification, some different actions might be assumed as part of FPC's commitment to follow the Standard.

S-8 Defining a CR-3 Specific Word/Term

This clarification is made when a specific word or term, not clarified in the Standards, is used in the Quality Program. Such definitions are added to assure an understanding of the Quality Program requirements.

S-9 No Commitment without Evaluation

This justification is used when FPC takes exceptions to an NRC change of a recommendation in a Standard to a requirement. Such an exception is justified because FPC is voluntarily increasing the commitments in the Quality Program. While FPC wishes to meet the latest NRC guidance, insufficient data is available to allow FPC management to determine whether the NRC's "tightening" of recommendations produces an increase in safety, reliability or quality commensurate with the increased effort to meet the new requirements.

USNRC Positions

N-1 N45.2.5-1974 (Source of Concrete Test Samples)

The words used are based on a QA Branch interpretation (QAB #3) issued in a memorandum dated July 1975. (Based on APCo's position in the Barton PSAR).

N-2 N45.2.11-1974 (Documentation of Design Reviews)

The words used are based on a QA Branch interpretation (QAB #8) issued by C. J. Heltemes, Jr. in a memorandum dated July 26, 1977. (Inquiry 1)

N-3 N45.2.11-1974 (Use of Initials)

The words used are based on a QA Branch interpretation (QAB #8) issued by C. J. Heltemes, Jr. in a memorandum dated July 26, 1977. (Inquiry 2)

N-4 N45.2.11-1974 (Timeliness of Design Verifications)

The words used are based on a QA Branch interpretation (QAB #10) issued by C. J. Heltemes, Jr. in a memorandum dated April 5, 1977.

N-5 N45.2.11-1974 (Interdisciplinary Review Documentation)

The words used are based on a QA Branch interpretation (QAB #12) issued by W. P. Haass in a memorandum dated May 20, 1980.

N-6 N45.2.12-1977 (Frequency for Supplier Audits)

The words used are based on a QA Branch interpretation (QAB #9) issued by C. J. Heltemes, Jr. in a memorandum dated December 23, 1977.

N-7 N18.7-1976 (Design and Construction Activities During Operations)

The words used are based on a QA Branch interpretation (QAB #7) issued by C. J. Heltemes, Jr. in a memorandum dated April 5, 1977.

N-8 N45.2.5-1974 (Bolt Length Beyond Nut)

Based on NRC accepted exception in the SNUPPS PSAR, Chapter 17A.0.

N-9 N45.2.13-1976 (Position on Nonconformance Disposition)

Based on NRC accepted position in the GESAR.

N-10 N101.4-1972

Based on NRC's withdrawal of this Standard from Chapter 17.2 of the SRP.

The words used are based on a QA Branch interpretation (QAB #6) issued by C. J. Heltemes, Jr. in a memorandum dated December 2, 1976.

Mr. J.P. O'Reilly
3F-0683-01

cc w/attachment

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

Mr. Tom Stetka
Regional Inspector
U.S. Nuclear Regulatory Commission
Crystal River Unit #3
Crystal River, FL