



SEP 21 2006

L-2006-208  
10 CFR 50.54(a)(3)  
10 CFR 50.54(a)(4)

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555-0001

RE: Florida Power and Light Company  
St. Lucie Units 1 and 2  
Docket Nos. 50-335 and 50-389  
Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251

FPL Energy Seabrook, LLC  
Seabrook Station  
Docket No. 50-443

FPL Energy Duane Arnold, LLC  
Duane Arnold Energy Center  
Docket No. 50-331

**Response to Request for Additional Information Regarding Common  
Quality Assurance Topical Report (TAC NOS. MD1142 Through MD1147)**

By letter dated March 31, 2006, as supplemented by letter dated June 12, 2006, Florida Power and Light Company (FPL), FPL Energy Seabrook, LLC, and FPL Energy Duane Arnold, LLC, collectively FPL, requested U.S. Nuclear Regulatory Commission (NRC) approval to adopt a common Quality Assurance Topical Report (QATR) for St. Lucie Nuclear Plant, Units 1 and 2, Turkey Point Nuclear Plant, Units 3 and 4, Seabrook Station, and Duane Arnold Energy Center.

By letter dated August 22, 2006, the NRC staff requested additional information to assist them in their review. Attachment 1 identifies the RAI and provides the FPL response. Attachment 2 provides markup pages of QATR which was revised in response to the RAI and to reflect organizational changes that have occurred since the original submittal. Attachment 3 provides the revised QATR. Attachment 4 is a table of exceptions / alternates to NQA-1-1994 updated in response to the RAI. Attachment 4 supercedes and replaces Enclosure (3) of the previous submittals.

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Should you have any questions or desire additional information regarding this matter, please call Bob Symes at (561) 694 -4287.

Respectfully,



Robert Acosta  
Director Nuclear Assurance

- Attachments:
1. Response to Request for Additional Information
  2. QATR Markup
  3. Revised QATR Pages
  4. QATR Exceptions/Alternatives

cc:	Regional Administrator, Region I	w/enclosures
	Regional Administrator, Region II	"
	Regional Administrator, Region III	"
	USNRC Project Manager, St. Lucie and Turkey Point	"
	Senior Resident Inspector, USNRC, St. Lucie	"
	Senior Resident Inspector, USNRC, Turkey Point	"
	USNRC Project Manager, Seabrook Station	"
	Senior Resident Inspector, USNRC, Seabrook Station	"
	USNRC Project Manager, Duane Arnold Energy Center	"
	Senior Resident Inspector, USNRC, Duane Arnold Energy Center	"

**ATTACHMENT 1**

**Response to Request for Additional Information**

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## ATTACHMENT 1

### **Response to NRC Request for Additional Information Request for Approval of FPL Quality Assurance Topical Report**

The staff reviewed the common Quality Assurance Topical Report (QATR) and developed the following list of requests for additional information for clarification in order to determine whether the licensee satisfies the requirements of Appendix B to 10 CFR Part 50.

The following is each of the staff's requests for additional information (*in italics*) followed by the FPL response.

#### **Enclosure 1, Quality Assurance Topical Report**

1. *(Policy Statement, Page 2): Standard Review Plan (SRP) Section 17.3, "Quality Assurance Program Description," specifies, in Part II.A.1.a that a written QAPD is issued by the licensee at the most senior management level. The Policy Statement is signed by the Chief Nuclear Officer (CNO), not by the Chief Executive Officer (CEO). In the current QATR for St. Lucie and Turkey Point units, the Policy Statement states, in part, "the President and Chief Executive Officer FPL Group has delegated responsibility for execution of the Quality Assurance Program for FPL nuclear plants to the Chief Nuclear Officer." Also, under "Organization", Section 1.2 states "the President and Chief Executive Officer FPL Group is ultimately responsible for the execution of the Quality Assurance Program for FPL nuclear plants." Provide an explanation of how the authority is passed from the CEO to the CNO in the proposed QATR.*

#### **FPL Response:**

The Chief Nuclear Officer (CNO) reports to the FPL Group Chairman and Chief Executive Officer. The CNO position is the most senior management level position of the applicant/licensee, having corporate responsibility for overall plant safety. The CNO is ultimately responsible for the execution of the quality assurance program for FPL nuclear plants. Accordingly, as in the past, the CNO signs the Policy Statement and issues the written quality assurance program description.

The last paragraph of the Policy Statement has been revised to state: "The Chief Nuclear Officer is responsible for implementing the QA policy and program. The authority for developing and verifying execution of the program is delegated to the Director Nuclear Assurance."

In addition, Section A.2.1.1 was revised as follows:

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**"A.2.1.1 FPL Group Chairman and Chief Executive Officer (CEO)**

This position provides executive direction and guidance for promulgation of corporate policy through FPL's senior management staff."

2. *(Revision Approval, Page 3): SRP Section 17.3, "Quality Assurance Program Description," specifies, in Part II.A.2.c, that the person filling the most senior-level management position is responsible for implementing the QA policy and program. The FPL QATR, and revision thereof, is approved by the Director Nuclear Assurance (DNA), not by the CEO. In the current QATR for St. Lucie and Turkey Point units, the Policy Statement states, in part, "the authority for developing and verifying execution of the program is delegated to the Director Nuclear Assurance." Provide an explanation of how the authority is passed from the CEO to the DNA in the proposed QATR.*

**FPL Response:**

To explain how the authority is passed from the CEO to the DNA, the QATR Policy was revised to state:

"The authority for developing and verifying execution of the program is delegated to the Director Nuclear Assurance."

The QATR has been revised to provide for approval by both the Director Nuclear Assurance and the Chief Nuclear Officer.

3. *(Section A.2, Page 10): Define the position of Senior Vice President Engineering mentioned in Section A.2.1.2.e, Vice President Integrated Supply Chain.*

**FPL Response:**

Section A.2.1.2.e has been revised to state: This position reports to the CEO through the Senior Vice President Engineering, Construction and Corporate Services.

The position of Senior Vice President Engineering, Construction and Corporate Services has no additional quality affecting responsibilities and, therefore need not be described in the QATR.

Additionally since the original QATR organization changes have occurred. These changes are reflected in the following changes to Section A.2.1.2.

Section A.2.1.2.e was revised as follows:

"A.2.1.2.e Vice President Integrated Supply Chain

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This position reports to the CEO through the Senior Vice President Engineering, Construction and Corporate Services and is responsible for procurement engineering; coordinating contract activities; negotiating, generating, and issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection of FPL nuclear plants, and for materials and equipment to support the Nuclear Division staff. Responsibilities also include the review of procurement documents to assure that technical and quality requirements are incorporated into the procurement documents that it authorizes, performance of receipt inspection to verify that purchased items comply with procurement document requirements (except at stations where receipt inspection is performed by the Quality Assurance Organization), and controlling materials received at each FPL nuclear plant site in accordance with company policy and procedures.”

Since the original QATR submittal inclusion of the procurement engineering function within the Integrated Supply organization has been standardized across the fleet. This paragraph was also revised to recognize that receipt inspection may be performed by the Quality Assurance Organization at some stations.

A new section A.2.1.2.g was added which reads as follows:

“A.2.1.2.g Vice President Information Management

This position is the FPL Group Chief Information Officer or CIO, and reports to the FPL CEO through the FPL Group Senior Vice President of Finance & Chief Financial Officer (CFO). The CIO is responsible for information management for the Nuclear Division including computer-related hardware and software acquisition, deployment, maintenance, control and replacement; telecommunications; information / cyber security; and applicable training.”

The Group Senior Vice President of Finance & Chief Financial Officer (CFO) has no additional quality affecting responsibilities and, therefore need not be described in the QATR.

4. (Section A.6, Page 18): FPL proposes to remove the word “documented” when referring to the reporting of significant conditions adverse to quality. Even though the removal of this wording is permissible under the 10 CFR 50.54(a)(3)(v) rule because it repeats the language used in NQA-1-1994 Basic Requirement 16, the effect of this removal should be carefully evaluated. The removal should not be interpreted that documentation is not required.

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FPL Response:

To avoid potential misinterpretation, Section A.6 has been revised to include the word "documented".

5. *(Section A.7, Page 19): SRP Section 17.3, "Quality Assurance Program Description," specifies, in Part II.A.7, the regulatory commitments the licensee must meet for the QATR to be found acceptable. In the QATR, the licensee states that a commitment to a particular Regulatory Guide (RG) does not constitute a commitment to other RGs or other standards that may be referenced therein. Provide explanation of how this statement is consistent with SRP guidance.*

FPL Response:

As regulatory guidance has evolved over the years, regulatory guides and endorsed standards have been revised, re-issued, and withdrawn. This has resulted in regulatory guides referencing other regulatory guides or standards that may have been superceded or revised. For instance Regulatory Guide 1.33, Revision 2, endorses many of the regulatory guides and standards that are superceded by Regulatory Guide 1.28, Revision 3.

Our statement that a commitment to a particular regulatory guide does not constitute a commitment to other regulatory guides or standards that may be referenced in that it serves to make it clear that referenced guides and standards are not committed to by default. When we are committing to all or part of a regulatory guide, we prefer to state that specifically.

6. *(Section A.7, Page 21): The discussion of RG 1.33 Position C3 for independent review should be revised to reflect the modified functions for the Onsite Review Group (ORG) to include independent review functions.*

FPL Response:

In Section A.7 the discussion of RG 1.33, Position C3, has been revised to state:

"Regulatory Position C.3 does not apply since FPL does not use independent/offsite review. However, Appendix A to the QATR specifies the expanded scope of review for the On-Site Review Group, which includes proposed changes to Operating License and Technical Specifications."

7. *(Section A.7): SRP Section 17.3, "Quality Assurance Program Description," specifies, in Part II.A.7.c, the applicable RG that contain programmatic QA guidance for specific items and activities that are important to safety. The current QATR for Duane Arnold contains*

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*details of commitments to RG 1.97, "Instrumentation for Light-water-cooled Nuclear Power Plants to assess Plant and Environs Conditions During and Following an Accident," and Generic Letter (GL) 85-06, "Quality Assurance Guidance for ATWS Equipment That Is Not Safety-related." Deleting these details from the proposed QATR based on the fact that they are not listed in SRP 17.3 Rev. 0 is not acceptable to the NRC staff. Provide a justification for not addressing documents as discussed in the draft SRP 17.3 Rev.1.*

FPL Response:

Although not included in the approved applicable Standard Review Plan SRP 17.3 Revision 0, FPL agrees to address RG 1.97 and GL 85-06 in the QATR. The following paragraphs have been added to Section A.7.

- "Regulatory Guide 1.97, Revision 3, May 1983, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident" (Table 1, paragraph 5) – In lieu of the Regulatory Guides listed in the Table, FPL commits to the Regulatory Guidance and industry standards for quality assurance as described in this QATR. Commitment to the technical provisions of Regulatory Guide 1.97 is site specific as addressed in each plant UFSAR or other licensing commitments. "
  - "Generic Letter 85-06, April 1985, "Quality Assurance Guidance for ATWS Equipment That Is Not Safety-Related" – FPL commits to the quality assurance guidance cited in the Generic Letter."
8. *(Section B.4, Page 29): The proposed QATR currently takes exceptions to Supplement 4S-1, Section 2.3 requirements. The exception regarding the use of the guidance contained in GL 89-02 to procure commercial grade items also affects Supplement 7S-1, Section 10 requirements. Regroup these exceptions as necessary for clarity. In addition, include a reference to GL 91-05 in the discussion of this exception. Both GL 89-02 and GL 91-05 establish the expectations for an effective commercial-grade dedication program. Also, add this exception, including the associated basis, to Enclosure 3 of the submittal.*

FPL Response:

FPL follows the guidance in Generic Letter 91-05 as well as Generic Letter 89-02. FPL concurs that exceptions to both 4S-1 and 7S-1 are appropriate since NQA-1-1994 does not adequately address procurement of commercial grade items.

Section B.4 has been revised as follows:



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- “For Supplement 4S-1, Section 2.3, which requires procurement documents to require a quality program that complies with NQA-1, FPL may apply other nationally recognized and NRC endorsed quality standards, such as N45.2, as appropriate to the circumstances of the procurement.”
- “For Supplement 4S-1 and Supplement 7S-1, FPL will use the guidance contained in Generic Letter 89-02/EPRI NP-5652 and Generic Letter 91-05 to procure Commercial Grade Items in lieu of these requirements.”

This has been documented as an exception in the revised Enclosure 3 (Attachment 4).

Additionally, Section A.7.3 has been revised to add the following commitment:

- “Generic Letter 91-05 (April 1991) – FPL commits to compliance with the guidance regarding licensee commercial-grade procurement and dedication programs.”
9. *(Section B.4, Page 29): The paragraph on procuring commercial grade calibration services should be identified as an exception to requirements in Supplements 4S-1 and 7S-1. Add this exception, including the associated basis, to Enclosure 3. Also, this paragraph should be revised to reflect the following elements discussed in the Safety Evaluation (SE) to Arizona Public Service on the subject:*
- (a) *The alternative method is documented in the QA program,*
  - (b) *The accreditation is to ANSI(American National Standards Institute)/ISO (International Standards Organization)/IEC (International Electrotechnical Commission 17025, “General Requirements for the Competence of Testing and Calibration Laboratories”)*
  - (c) *NRC review and approval is limited to NVLAP (National Voluntary Laboratory Accreditation Program) and A2LA (American Association for Laboratory Accreditation) as recognized signatories of the International Laboratory Accreditation Cooperation (ILAC) program,*
  - (d) *Purchase documents impose additional technical and administrative requirements to satisfy necessary licensee’s QA program and technical requirements,*
  - (e) *Purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance,*
  - (f) *Purchase documents require identification of the laboratory equipment/standards used.*

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FPL Response:

The paragraph has been revised to read as follows:

- “When purchasing commercial grade calibration services from a supplier that has been accredited by a nationally recognized accrediting body (NAVLAP or other accrediting body recognized by NAVLAP via a Mutual Recognition Agreement (MRA)), FPL may accept the accreditation in lieu of performing an audit, accepting an audit by another licensee, or conducting a commercial grade survey. In order to accept the accreditation FPL will perform a documented review of the supplier's accreditation. The review shall, as a minimum, verify all of the following:
  - (a) The accreditation is to ANSI/ISO/IEC 17025, “General Requirements for the Competence of Testing and Calibration Laboratories.”
  - (b) The accrediting body is NVLAP (National Voluntary Laboratory Accreditation Program) or A2LA (American Association for Laboratory Accreditation).
  - (c) The published Scope of Accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.”

Normal FPL procurement controls for calibration services require (1) the reporting of as-found calibration data when calibrated items are found to be out-of-tolerance, (2) identification of the laboratory equipment/standards used, and (3) imposition of additional technical and administrative requirements, as necessary, to satisfy the FPL QA Program and technical requirements.

The exception has been identified as an exception to Supplement 4S-1 and Supplement 7S-1, in Section B.4 and added to the revised Enclosure 3 (Attachment 4).

10. *(Section B.7, Page 30): Exception to NQA-1-1994, Subpart 2.2, Section 6.2.4 should also be listed in QATR, Section B.7. This exception is discussed in Section A.7 under RG 1.38. Add this exception, including the associated basis, to Enclosure 3.*

FPL Response:

Section B.7 has been modified to add the following exception currently listed under Section A.7:

- “Subpart 2.2, Section 6.2.4 states that the use or storage of food, drinks, and salt tablet dispensers in controlled storage areas shall not be permitted. FPL takes exception to the wording of Section 6.2.4 and substitutes an alternate requirement that the use or storage of food, drinks, and salt tablet dispensers in any storage area

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shall be controlled and be limited to designated areas where such use or storage is not deleterious to the stored items.”

This exception and the associated basis have been included in the revised Enclosure 3 (Attachment 4).

11. *(Section B.8, Page 32): Section B.8 should state commitment to Subpart 2.8 and include the exception to NQA-1-1994, Subpart 2.8, Section 5. The exception is discussed in Section A.7 under RG 1.116, Position C3. Additionally, for the new reactor licensing process, RG 1.68 must be used. Also, add this exception, including the associated basis, to Enclosure 3.*

FPL Response:

The discussion in Section A.7, under RG 1.116, is intended to provide clarification and does not constitute an exception.

QATR Section A.7 under RG 1.116 C3 states, in part:

“Regulatory Position C.3 recommends using section 5 of N45.2.8 in conjunction with Regulatory Guide 1.68 for pre-operational, cold functional, and hot functional testing. While section 5 of NQA-1, Subpart 2.8 provides the same requirements, it is anticipated that FPL plants, since they are already beyond these tests, will not need to implement Regulatory Guide 1.68. If testing in accordance with Regulatory Guide 1.68 becomes necessary, FPL will comply with the guidance of the Regulatory Guide 1.116 position.”

Therefore, the above discussion serves to clarify that Regulatory Guide 1.68 does not apply at this time since FPL is past pre-operational, cold functional, and hot functional testing for all current plants. However, if it did become applicable in the future we commit to meeting the subject requirements.

12. *(Section B.14, Page 36): Section B.14 states, in part, “Temporary changes to approved procedures that do not change the intent are approved by two members of plant staff knowledgeable in the areas affected by the procedure. Temporary changes to procedures identified in Appendix B are approved by two members of plant staff knowledgeable in the areas affected by the procedure, at least one of whom is a person holding a senior reactor operator’s license.” Provide an explanation on the difference, if any, between the first sentence and the second sentence. ANSI N18.7 defines temporary changes as changes which clearly do not change the intent of the approved procedure. These changes shall be approved by two members of the plant staff, at least one of the two is a licensed senior reactor operator.*

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FPL Response:

The first sentence applies to all temporary changes to procedures that do not change the intent. The second sentence adds the additional requirement that at least one of the reviewers hold a senior reactor operator license for procedures listed in QATR Appendix B (those procedures within the scope of ANSI N18.7).

To assure clarity Section B.14 has been revised to read:

“Temporary changes to approved procedures that do not change the intent are approved by two members of plant staff knowledgeable in the areas affected by the procedure. Additionally for temporary changes to approved procedures identified in Appendix B of this QATR, at least one of the two approvers must hold a senior reactor operator’s license.”

13. *(Section B.14, Page 36): For Seabrook plant, in addition to the approval described above, temporary changes to procedures of Technical Specification 6.7.1 are required to have a final approval within 14 days of implementation. Provide an explanation on the difference, if any, between the current practice and the proposed practice. Add additional details as needed to the QATR.*

FPL Response:

There is no difference between the current practice and the proposed practice. To assure clarity the following has been added to Section B.14 of the QATR.

“Temporary changes are documented, reviewed by the ORG or by a Qualified Reviewer, and approved by the designated approval authority within 14 days of implementation.”

14. *(Appendix A): For sites other than Duane Arnold Energy Center, items to be reviewed by the Plant Nuclear Safety Committee, Facility Review Group or Station Operation Review Committee are more than the ones listed for the ORG in the proposed QATR. The licensee should evaluate whether the deleted items are related to any commitment previously accepted by the NRC. Provide the results of such evaluation to assist the NRC staff in the review of the proposed QATR.*

FPL Response:

The following is the result of a review to determine the source of the previous specific plant onsite review group requirements:

- The requirement for review of diesel fuel oil testing program was contained in License Amendments No. 169 and No. 163 for Turkey Point Plant Units 3 and 4, respectively, issued December 28, 1994. This commitment was later transferred

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from the Administrative Technical Specifications to the QA program description.

- The requirement for review of the Fire Protection Program and implementing procedures was contained in License Amendments No. 159 and No. 153 for Turkey Point Units 3 and 4, respectively, dated February 25, 1994. This commitment was later transferred from the Administrative Technical Specifications to the QA program description.

The source of other site specific on review requirements has not been determined. As a result, to facilitate NRC review, we have decided to add back in the site specific onsite review requirements.

QATR Appendix A, Section 4.0 has been revised as follows:

“The ORG reviews at least the following:

- (1) Changes to the Offsite Dose Calculation Manual (OCDM) and the Process Control Program (PCP). In addition, changes to Radwaste Treatment Systems are also reviewed for St. Lucie Plants and Seabrook Station.
- (2) Proposed tests or experiments that affect nuclear safety.
- (3) Proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- (4) Written 10CFR50.59/72.48 evaluations to verify that changes to the facility or procedures, tests or experiments do not involve a change in the Technical Specifications or require prior NRC review.
- (5) Proposed changes to Operating License and Technical Specifications.
- (6) Reports covering violations of applicable NRC statutes, codes, regulations, orders, Technical Specifications, license requirements or of internal documents having nuclear safety significance.
- (7) Reports of special reviews and investigations as requested by the Site Vice President, Site Director, or plant manager.
- (8) Events reportable in writing to the NRC according to applicable regulations.
- (9) Reports of significant operating abnormalities or deviations from the normal and expected performance of plant equipment or systems that affect nuclear safety.

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- (10) All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
- (11) Review of any accidental, unplanned, or uncontrolled radioactivity release.
- (12) Any other matter related to nuclear safety requested by the Site Vice President, Site Director or plant manager, selected by ORG members, or referred to the ORG by other site or corporate organizations.
- (13) Review of Diesel Fuel Oil Testing Program and implementing procedures (Turkey Point only).
- (14) Review and documentation of judgment concerning prolonged operation in bypass, channel trip, and/or repair of defective protection channels of process variables placed in bypass since the last ORG meeting. (St. Lucie only)

Reviews of Items (6) through (12) include results of any investigations made and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.”

Consistent with NRC Regulatory Issue Summary 99-02, “Relaxation of Technical Specification Requirements for PORC Review of Fire Protection Program Changes,” the review of fire protection program and implementing procedures by the ORG will be replaced at Turkey Point, St. Lucie, and Seabrook Station by procedural controls to ensure that the screening process for assessing changes to the fire protection program and associated implementing procedures provides for technical reviews by appropriately qualified individuals.

See also the response to RAI #2 to the Table Comparing ANSI N18.7-1976/ANS-3.2 and the FPL QATR for a discussion of the review of procedures.

Except for changes related to Fire Protection, as noted above, the scope of review of the ORG encompasses the review scope of the previous FRG, PNSC, and SORC. The ORG scope of review also includes previous Company Nuclear Review Group (CNRB) reviews, except for the review of reports and meeting minutes of the ORG.

- 15. *(Appendix A): For sites other than Duane Arnold Energy Center, items to be reviewed by the Company Nuclear Review Board (CNRB) are more than the ones listed for the ORG in the proposed QATR. The licensee should evaluate whether the deleted items are related*

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*to any commitment previously accepted by the NRC. Provide the results of such evaluation to assist the NRC staff in the review of the proposed QATR.*

FPL Response:

As described in response to the above RAI #14, the scope of review of the ORG encompasses the review scope for the previous CNRB.

16. *(Appendix C, Page 53): Definition for the term "independent review" as given in ANSI N18.7-1976, Section 2.2 is not included in the proposed QATR. Add the definition to the QATR.*

FPL Response:

The following definition has been added to Appendix C of the QATR.

"Independent Review: Review completed by personnel not having direct responsibility for the work function under review whether they operate as part of an organizational unit or individual staff members (see "Review" definition)."

17. *(Appendix C, Page 53): Definition for the term "off-normal condition procedures" in the proposed QATR is not consistent with the full definition given in ANSI N18.7-1976, Section 2.2. Add the definition to the QATR.*

FPL Response:

The definition of "off-normal condition procedures" has been modified as follows.

"Off-normal Condition Procedures: Written procedures which specify operator actions for restoring an operating variable to its normal controlled value when it departs from its range, or to restore normal operating conditions following a perturbation. Such actions are invoked following an operator observation or an annunciator alarm indicating a condition which, if not corrected, could degenerate into a condition requiring action under an emergency procedure. (May be called Abnormal, Off-normal or other terms conveying the same intent.)"

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## **Enclosure 2, Program Comparison Matrix**

1. *In an SE dated August 26, 1999, NRC staff accepted a proposed alternative in which the Tennessee Valley Authority (TVA) transferred the Independent Safety Engineering Group functions from the Licensing organization to the Engineering organization. Provide an explanation of how this SE is applicable to the stated reduction in commitment in the proposed QATR, Appendix A.*

### **FPL Response:**

The current QA Program descriptions for Seabrook and St. Lucie Unit 2 describe an independent technical review function. (The QA Program descriptions for Turkey Point Units 3 and 4, St. Lucie Unit 1, and Duane Arnold do not include this requirement.)

The independent review function (Independent Safety Engineering Group (ISEG)) implements guidance of NUREG-0737. Since the time of FPL's original commitment, the operating experience program and corrective action programs have matured, design organizations have been located to each site, and system engineering organizations have been established. These engineering organizations are responsible for review of all changes affecting the design basis, monitoring the performance of plant equipment, evaluating plant events such as reactor trips, plant transients and adverse equipment trends, and providing technical assistance to the operations and maintenance staffs. The technical review function is now redundant with established site engineering functions and for that reason it is not included in the proposed QATR.

NRC SER dated August 26, 1999 approved a change transferring the ISEG function to the Engineering organization and removing it from the QA program description. The following is a discussion of how this SER is applicable to FPL plants.

By letter dated March 2, 1999, supplemented by letters dated June 2 and August 25, 1999, the Tennessee Valley Authority (TVA or licensee) submitted a request to eliminate the requirement for independent technical reviews from the Nuclear Quality Assurance (NQA) Plan (TVA-NQA-PLN89A). This function implements the guidance of NUREG-0737 for establishment of an independent safety engineering group (ISEG) at nuclear sites.

This request was approved by NRC SER Letter August 26, 1999, from Herbert N. Berkow of the NRC to J.A. Scalice of Tennessee Valley Authority (TVA).

The bases for NRC's approval are applicable to Seabrook and St. Lucie Unit 2 as follows:



St. Lucie Units 1 and 2, Docket Nos. 50-335 and 50-389  
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### Independent Review Functions/Responsibilities

The staff position with regard to ISEG responsibilities is provided in the improved Standard Technical Specifications as encompassing:

- Plant operating characteristics, NRC issuances, industry advisories, Licensee Event Reports, and other sources which may indicate areas for improving plant safety,
- Plant operations, modifications, maintenance, and surveillance to independently verify that these activities are performed safely and correctly and that human errors are reduced as much as possible,
- Internal and external operational experience information that may indicate areas for improving plant safety.

At FPL these responsibilities are within the general responsibilities of the site engineering organizations. These responsibilities include system performance monitoring, review of operating experience information, operability evaluations, and review of changes to the technical specifications and the Final Safety Analysis Report that affect the design bases.

Design engineering organizations are responsible for maintaining the design bases and design configuration for each plant. Design bases reconstitution and verification programs have been implemented for each site. Engineering activities include support for operations, maintenance and outage activities and support for outage planning and execution.

System engineering organizations provide technical assistance to the plant maintenance and operations staffs. Through implementation of the Maintenance Rule, system engineers continuously collect equipment performance data and assess the data against performance goals. The licensee's corrective action program requires structured investigations and root cause analyses of adverse operational characteristics such as reactor trips, significant events, and negative trends.

### Independence

NUREG-0737 states that ISEG must be independent of the operating organization. The ISEG organization should report offsite to a corporate official who holds a high-level, technically-oriented position that is not in the management chain for power production.

At FPL the site engineering staffs provide technical expertise. These engineering staffs report offsite to the Vice President Nuclear Engineering, a high-level corporate position that is not in the management chain for power production. The proposed alternative satisfies the NUREG-0737 guidance concerning organizational independence.

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### Composition

NUREG-0737 describes the ISEG organization as comprised of a minimum of five dedicated, full-time engineers.

The NRC staff position regarding the composition of the ISEG organization has evolved, such that the staff has allowed and encouraged the integration of the ISEG function into a cohesive program that provides senior level management with an assessment of facility operation and recommendations to improve nuclear safety and plant reliability. A precedent for deletion of the composition requirement was established for Seabrook, by amendment issued on February 14, 1995. Deletion of the specific composition requirement in the proposed ISEG alternative is consistent with the current staff position.

### Personnel Qualifications

FPL follows the guidance of Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants," for engineering support personnel. FPL's policy, implemented through position descriptions, is to staff the site engineering organizations with experienced engineers having, as a minimum, a bachelor's degree in engineering.

FPL is a member of the National Academy for Nuclear Training, which assists members in developing, implementing and maintaining performance-based training programs and evaluates the quality and effectiveness of these programs. The licensee's implementation of the accredited Engineering Support Personnel training program is in compliance with 10 CFR 50.120, "Training Rule."

Qualification requirements for personnel performing the independent technical review function satisfy the guidance of NUREG-0737, Item I.B.1.2.

### Reports

Quarterly System Health Reports, which identify plant reliability issues and provide a summary of plant performance, are submitted to the Site Vice President and other management positions. Input for these reports is prepared by system engineers, who collect equipment performance data and examine the data against established performance goals, in accordance with the Maintenance Rule (10 CFR 50.65).

In summary, FPL meets all of the bases of the TVA SER and therefore the SER is applicable to FPL.

- In an SE dated January 28, 2005, the NRC staff accepted a proposed alternative in which Nuclear Management Company (NMC) transferred the Independent Review functions from the Corporate Safety Review Committee to the Plant Operating Review Committee. Provide an explanation of how this SE is applicable to the stated reduction in commitment in the proposed QATR, Appendix A.*

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FPL Response:

The following discussion identifies the NRC bases ( in italics) from NRC SE dated January 28, 2005, followed by the FPL explanation of how the SE is applicable to the stated reduction in commitment in the proposed QATR Appendix A.

2.1 Independent Review Bodies

1. *PORC will perform the independent review of safety evaluations for changes in the facility as described in the final safety analysis report (FSAR) prior to implementation of the change. PORC will evaluate the effect on safety and if a technical specification (TS) change or NRC review is required. As applicable, the PORC review will be augmented by another review that is completed during the design process. The NMC QATR requires that design verification be performed by any competent individual(s) or group(s) other than those who performed the original design but who may be from the same organization. These reviews verify that changes in the facility do not result in a loss of adequate design or safety margins.*

FPL Explanation:

The FPL ORG will perform independent reviews in accordance with FPL-1 Quality Assurance Topical Report Appendix A line items (3) Proposed changes or modifications to plant systems or equipment that affect nuclear safety and (4) Written 10CFR50.59/72.48 Evaluations to verify that changes to the facility or procedures, tests or experiments do not involve a change in the Technical Specifications or require prior NRC review. ORG will evaluate the effect on safety and if a technical specification (TS) change or NRC review is required.

The FPL ORG review will be augmented by reviews that are completed during the design process. Basic Requirement 3, Design Control, Supplement 3S-1, Supplementary Requirements for Design Control, paragraph 4 requires that design verification be performed by any competent individual(s) or group(s) other than those who performed the original design but who may be from the same organization.

2. *A qualified person, independent of the preparer, will review changes in the procedures as described in the FSAR prior to implementation of the change. The procedure review process includes an independent evaluation of changes to determine if a TS change or other NRC approval is required. The QATR will require that independent assessments of selected procedure changes be performed to verify the procedure reviews and revision controls are effectively*

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*implemented. Independent assessments are performed by the Nuclear Oversight Organization to verify effective implementation of procedures and processes.*

*PORC will perform the independent review of tests and experiments not described in the FSAR prior to implementation of the test and experiment. PORC will evaluate if the test or experiment requires a TS change or NRC review. Furthermore, tests and experiments are conducted in accordance with procedures. The independent review process for changes to procedures described in the FSAR as discussed above will also apply.*

FPL Explanation:

FPL also utilizes a qualified reviewer process. QATR Section B.14 describes this as follows:

“Procedures governing generating site activities (see Appendix B) are reviewed by qualified persons, other than the preparer, as designated by the Plant Manager. Such procedure reviews include determination whether additional cross-discipline reviews are required. Only safety related procedures, and procedures important to safety as used in 10CFR71 and 72, from the types listed in Appendix B (pages 51-53), require this review.”

A qualified person, independent of the preparer, will review changes in the procedures as described in the FSAR prior to implementation of the change. The procedure review process includes an independent evaluation of changes to determine if a TS change or other NRC approval is required.

In accordance with Appendix A the ORG reviews written 10CFR50.59/72.48 evaluations to verify that changes to procedures do not involve a change in the Technical Specifications or require prior NRC review.

In accordance with QATR Table 1 control of procedures is routinely included in independent assessments. Independent assessment of procedure control assures that changes are properly controlled and are incorporated into permanent procedure changes in a timely manner where appropriate.

ORG will perform the independent review of tests and experiments not described in the FSAR prior to implementation in accordance with FPL-1 Quality Assurance Topical Report Appendix A line items (2) Proposed tests or experiments that affect nuclear safety and (4) Written 10CFR50.59/72.48 Evaluations to verify that changes to the facility or procedures, tests or

experiments do not involve a change in the Technical Specifications or require prior NRC review.

3. *PORC will perform the independent review of TS changes and license amendments relating to nuclear safety prior to implementation, except in those cases where the change is identical to a previously reviewed proposed change.*

FPL Explanation:

ORG will perform the independent review of TS changes and license amendments relating to nuclear safety prior to implementation in accordance with FPL-1 Quality Assurance Topical Report Appendix A line item (5) Proposed changes to Operating License and Technical Specifications.

4. *PORC will perform the independent review of violations, deviations, and reportable events which require reporting to the NRC in writing within 24 hours. This review will include the results of investigations and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.*

FPL Explanation:

ORG will perform the independent review of violations, deviations, and reportable events which require reporting to the NRC in writing within 24 hours in accordance with FPL-1 Quality Assurance Topical Report Appendix A line items (6) Reports covering violations of applicable NRC statutes, codes, regulations, orders, Technical Specifications, license requirements or of internal documents having nuclear safety significance; (8) Events reportable in writing to the NRC according to applicable regulations and; (9) Reports of significant operating abnormalities or deviations from normal and expected performance of plant equipment or systems that affect nuclear safety.

FPL-1 Quality Assurance Topical Report Appendix A states "Reviews of items (6) through (12) include results of any investigations made and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event."

5. *PORC will perform an independent review of any matter related to nuclear safety that is requested by the Site Vice President, Site Director, Plant Manager, any PORC member, or by other NMC organizations.*

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FPL Explanation:

ORG will perform the independent review of any matter related to nuclear safety that is requested by the Site Vice President, Site Director, Plant Manager, any ORG member, or by other FPL organizations in accordance with FPL-1 Quality Assurance Topical Report Appendix A line item (12). "Any other matter related to nuclear safety requested by the Site Vice President, Site Director or plant manager, selected by ORG members, or referred to ORG by other site or corporate organizations."

6. *The licensee's review and assessment programs include review of significant proposed plant changes or tests, verification that reportable events are promptly investigated and corrected, and looking for trends which may not be apparent to the day-to day observer. The Nuclear Oversight management and management responsible for the areas assessed will review the results of all independent assessments.*

FPL Explanation:

ORG reviews described above include review of significant proposed plant changes or tests and verification that reportable events are promptly investigated and corrected. QATR Section A.6 requires significant conditions adverse to quality and significant adverse trends to be documented and reported to responsible management.

FPL QATR "Section C.1, Methodology, establishes programs for reviews and assessments to verify that activities covered by this QATR are performed in compliance with the requirements established, review significant proposed plant changes or tests, verify that reportable events are promptly investigated and corrected, and detect trends which may not be apparent to the day-to-day observer. These programs are, themselves, reviewed for effectiveness as part of the overall assessment process, as described herein."

FPL QATR "Section C.3, Independent Assessment, establishes that results of independent assessments are reported in an understandable form and in a timely fashion to a level of management having the authority to effect corrective action. Quality Assurance conducts timely follow-up action, including re-assessment of deficient areas, as necessary to establish adequacy of corrective actions."

ORG will perform the independent review of: reports covering violations of applicable NRC statutes, codes, regulations, orders, Technical Specifications, or license requirements; reports of special reviews and investigations as

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requested by the Site Vice President, Site Director, or plant manager; events reportable in writing to the NRC according to applicable regulations; any other matter related to nuclear safety requested by the Site Vice President, Site Director or plant manager, selected by ORG members, or referred to ORG by other site or corporate organizations, and reports of significant operating abnormalities or deviations from normal and expected performance of plant equipment or systems that affect nuclear safety.

ORG reviews of the above items include results of any investigations made and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.

FPL has established a program of planned and periodic performance-based independent assessments to monitor overall performance and confirm that activities affecting quality comply with the Quality Assurance Program (QAP) and that the QAP is effectively implemented. The organization performing independent assessment (Quality Assurance) is technically and performance oriented, with its focus on the quality of the end product and the effective implementation of procedures and processes. The independent assessment program provides comprehensive independent evaluations of activities and procedures, including corrective action as identified in Table 1 of Section C, Assessment.

## 2.2 Organizational Freedom

*ANSI N18.7-1976 defines an independent review as a review completed by personnel not having direct responsibility for the work function under review regardless of whether they operate as an organizational unit or as individual staff members, and states that a standing committee or organizational unit may function as an independent review body. The responsible persons or organizations must be sufficiently independent from cost and scheduling considerations when opposed to safety considerations. NMC supplements other discussions in the QATR regarding independence by incorporating the following into the appropriate sections of the QATR:*

- *In discharging its independent review responsibilities, the PORC shall keep safety considerations paramount when opposed to cost or schedule considerations. Should a voting member at a particular meeting have direct responsibility for an item under review where a conflict of such considerations is likely, that member shall be replaced (to fill the quorum) by another voting member not having such potential conflict.*

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- *Persons performing independent assessments do not have direct responsibility for any area being assessed, and do not report to a management position with immediate responsibility for the activity being assessed.*

*The focused, performance-oriented review to be commissioned by plant and corporate management will also be performed by an independent team of personnel with experience and competence in the activities being reviewed. The plant and corporate management have flexibility in assigning or hiring personnel to perform the reviews of particular issues but each must be independent (from cost and schedule considerations) from the organizations responsible for the associated activities. Outside consultants or organizations are used as necessary to ensure the team has the requisite expertise and competence.*

FPL Explanation:

Appendix A, 1.0 General states: "In discharging its review responsibilities, ORG shall keep safety considerations paramount when opposed to cost or schedule considerations. Should a voting member at a particular meeting have direct responsibility for item under review where a conflict of such considerations is likely, that member shall be replaced (to fill the quorum) by another voting member not having such potential conflict. "

QATR Section C.3, Independent Assessment states: "Persons performing independent assessments do not have direct responsibility for any area being assessed, and do not report to a management position with immediate responsibility for the activity being assessed. FPL assessment resources may be supplemented with technical specialists as needed."

QATR Section C.1, Methodology states: "FPL periodically performs independent reviews of matters involving the safe operation of its fleet of nuclear power plants, with a minimum of one such review being conducted for each generating site each year. The review addresses matters that plant and corporate management determine warrant special attention, such as plant programs, performance trends, employee concerns, or matters related to safe plant operations. The review is performed by a team consisting of personnel with experience and competence in the activities being reviewed, but independent (from cost and schedule considerations) from the organizations responsible for those activities. The review is supplemented by outside consultants or organizations as necessary to ensure the team has the requisite expertise and competence. Results are documented and reported to responsible management."

3. *Section 1.8 of the Updated Final Safety Analysis Report (UFSAR) for Seabrook contains discussion of specific commitments to RG 1.28 and RG 1.33. Provide a discussion of how*



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*changes will be made to affected UFSAR Sections in conjunction with the change in the proposed QATR to maintain consistency of information in the UFSAR.*

**FPL Response:**

In accordance with the Change Management Plan developed for implementation of the QATR, the UFSAR for each plant will be modified to reflect all new or revised QATR commitments.

**Enclosure 3, List of Exception and Alternatives**

*As stated in 10 CFR 50.54(a)(3)(ii), the use of a quality assurance alternative or exception approved by an NRC SE, provided that the bases of the NRC approval are applicable to the licensee's facility, is not considered a reduction in commitment. The staff needs to understand how the bases of the NRC approval are applicable to the licensee's individual facilities. A statement that the basis is met is not adequate.*

*Good examples of adequate information included in the FPL submittal are:*

- *Exception to Supplement 4S-1. Section 2.3 on Page 3 of Enclosure 3*
- *Exception to Position C.3.2 or RG 1.28, Rev 3 on Page 3 of Enclosure 3.*

*The following criteria are used in the staff's review of the list of alternatives or exceptions:*

- *Current exceptions/alternatives that are already incorporated into existing facility QAPDs do not need to be explained.*
  - *For exceptions/alternatives not currently incorporated in existing facility QAPDs, the basis of the approved SE and an explanation of how the SE is applicable to the specific facility should be provided.*
1. *For each of the exceptions and alternatives mentioned in Enclosure 3, provide a basis for the applicability of the exception for each FPL facility.*

**FPL Response:**

Each of the exceptions listed in Enclosure 3 (Attachment 4) have been reviewed against the Staff's review criteria and modified where necessary.

2. *Exception to Supplement 2S-1 states that, "Inspections, examinations and tests may be performed by individuals in the same organization as that which performed the work." Explain why this exception is taken under personnel training and qualification and not under inspection. Additionally, the QATR states in Section B.12, "Inspections," that "inspections are carried out by properly qualified persons independent of those who performed or directly supervised the work." Explain why this statement is not in conflict with the exception.*

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FPL Response:

The exception to 2S-1 is for inspections performed by individuals in the same organization as that which performed the work. This is an exception to the training and qualification requirements and therefore appropriate for inclusion in this section.

The statement in B.12 applies to all inspections, including those performed by individuals in the same organization as that which performed the work. In all cases inspections in accordance with the QATR are "carried out by qualified persons independent of those who performed or directly supervised the work. This is consistent with Basic Requirement 10 which states "Inspection for acceptance shall be performed by persons other than those who performed or directly supervised the work being accepted," and with Supplement 10S-1, Paragraph 3.1, which states "Inspection personnel shall not report directly to the immediate supervisors who are responsible for performing the work being inspected." FPL commits to Basic Requirement 10 and Supplement 10S-1 without exception.

The purpose of the exception is to permit line personnel at FPL stations, who are in the same organization as that which performed the work, to conduct verification inspections, examinations, measurements, or tests on material products or activities. This exception addresses the training and qualification required of these individuals, and the conditions under which they can conduct these activities. Complementary to this exception is an exception to Non Mandatory Appendix 2A-1, regarding the three levels of qualification/certification of inspection and test personnel (See discussion for RAI #3 below). The exception to Non Mandatory Appendix 2A-1 applies to the same personnel as those covered by the exception to Supplement 2S-1. Since these personnel are trained and qualified to perform the activities as specified under this exception, they do not need to be certified to the three levels contained in Non Mandatory Appendix 2A-1.

This exception to Supplement 2S-1 will be implemented through training for personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities that are in the same organization as that which performed the work. FPL will apply this exception only to line personnel performing quality control inspections. It does not apply to quality assurance personnel. The implementation of this exception will ensure that (1) the same level of qualification is required as for those who performed the work, (2) the personnel will be required to have the necessary skills and/or have the verification requirements specified in procedures, and (3) where the work involves the breaching of a pressure boundary, additional assurance of the quality of work can be obtained through a functional test. If the above three factors cannot be met, the inspection responsibility would be assigned to personnel qualified in accordance with the commitment to NQA-1-1994.

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The alternative meets the requirements of 10 CFR Part 50, Appendix B, Criterion II, by requiring training and qualification of personnel that assures suitable proficiency is achieved and maintained in the skills necessary to perform quality verification inspections and tests. The individuals qualified in accordance with this alternative participate in a training program that meets the intent of 10 CFR 50.120.

This exception was based on the 2005 Nuclear Management Company (NMC) fleet QATR submittal; NMC based it on a previous Palisades exception. This alternative is used by NMC to describe alternative training methods if it implemented line performance of quality control inspections. FPL will also apply it only to line personnel performing quality control inspections. It does not apply to quality assurance personnel. The qualification requirements for this alternative are documented in the basis for the NMC Quality Assurance Topical Report (QATR) Exception A.5 for NQA-1-1994, Supplement 2S-1 in Enclosure 3 of the NMC letter dated March 31, 2003 (ML033070161). The approval for this alternative was originally addressed in a letter from NRC Region III to Consumers Power Company, Docket Nos. 50-155 and 50-255, dated February 27, 1992. The basis for the NMC alternative is that (1) the same level of qualification is required as for the individual who performed the work, (2) the personnel will be required to have the necessary skills and/or the verification requirements will be specified in the procedures/instructions, and (3) where the work involves breaching of a pressure boundary, additional assurance of the quality of work can be obtained through a functional test. Planning for such inspections and tests is performed by individuals meeting qualification requirements equivalent to those specified in 2A-1 and suitably trained for the function.

This exception is acceptable for FPL because the basis for the FPL exception is equal to that indicated in the NMC alternative.

3. *For the exception taken under Appendix 2A-1 regarding the three levels of qualification/certification of inspectors, provide the initial qualification requirements for inspectors. For example, refer to Dominion QA Consolidation submittal, Attachment 2, "Description of Changes," and the associated supplemental document dated August 24, 2004, and May 05, 2005, respectively.*

FPL Response:

The purpose of the exception is to allow line personnel at FPL plants to perform inspections although they are in the same organization that performed the work. These individuals are qualified in an accredited systematic approach to training-based training program that meets 10 CFR 50.120; have the same minimum level of qualification as the individual performing the task, have the necessary skills; and have the verification requirements specified in procedures, to be exempt from being certified Level I, II, or III as required in NQA-1-1994 Non Mandatory Appendix 2A-1. Complementary to this exception

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is an exception to NQA-1-1994 Supplement 2S-1, regarding alternative qualifications for inspectors. (See discussion for RAI #2 above). The purpose of the exception to Supplement 2S-1 is to permit line personnel, who are in the same organization as that which performed the work, to conduct verification inspections, examinations, measurements, or tests on material products or activities. This exception to Non Mandatory Appendix 2A-1, regarding the three levels of qualification/ certification of inspection and test personnel, applies to the same personnel as those covered by the exception to Supplement 2S-1; since these personnel are trained, qualified, and perform the activities as specified under the 2S-1 exception, they do not need to be certified to the three levels contained in Non Mandatory Appendix 2A-1.

This alternative meets the requirements of 10 CFR Part 50, Appendix B, Criterion II, by requiring training and qualification of personnel that assures suitable proficiency is achieved and maintained in the skills needed to perform quality verification inspections and tests. The individuals qualified in accordance with this alternative participate in a training program that meets the intent of 10 CFR 50.120.

This alternative is similar to the qualification requirements documented in the basis for the Nuclear Management Company Quality Assurance Topical Report (NMC QATR) for a related exception to NQA-1-1994, Supplement 2S-1. The approval of this alternative was originally addressed in a letter from NRC Region III to Consumers Power Company, Docket Nos. 50-155 and 50-255 dated February 27, 1992. The basis for the FPL change is equal to that indicated in the NMC alternative in that (1) the same level of qualification is required, (2) the personnel will be required to have the necessary skills and/or the verification requirements will be specified in the procedures/instructions, and (3) where the work involves breaching of a pressure boundary, additional assurance of the quality of work can be obtained through a functional test. If the above factors can not be met, the inspection responsibility would be assigned to personnel qualified in accordance with the commitment to NQA-1-1994.

This exception is acceptable for FPL because the accredited systematic approach to training-based training program evaluates and qualifies individuals to tasks, and determines minimum requirements relating to education, skills and experience.

Individuals responsible for the planning of such quality verification inspections and tests (i.e.; establishing hold points and acceptance criteria in procedures, or determining who will be responsible for performing the inspections) will meet the qualification requirements equivalent to those contained in Appendix 2A-1 and suitably trained for the function.

The corresponding basis for the QATR exception (Attachment 4) has been revised to reflect this response.

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To improve clarity, the exception in QATR Section A.5 has been modified as follows:

- “In lieu of being certified as Level I, II or III in accordance with Non-mandatory Appendix 2A-1 of NQA-1-1994, personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities, that are in the same organization as that which performed the work, will be required to possess the same minimum level of qualification as that required for performing the task being verified. The verification shall be within the skills of these personnel and/or is addressed by procedures. Individuals responsible for the planning of such quality verification inspections and tests (i.e. establishing hold points and acceptance criteria in procedures, or determining who will be responsible for performing the inspections) will meet qualification requirements equivalent to those contained in Appendix 2A-1 and suitably trained for the function.”

Additionally the exception to Regulatory Guide 1.28 in QATR Section A.7 has been modified as follows for consistency:

“Regulatory Guide 1.28, Revision 3, August 1985, “Quality Assurance Program Requirements (Design and Construction)” (ASME NQA-1, 1983a) – FPL does not commit to comply with position C.1 of this Regulatory Guide for personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities, that are in the same organization as that which performed the work; See the specific exceptions to 2S-1 and 2A-1 contained in Section A.5 of this QATR.”

4. *For the Supplement 2S-3 alternative regarding the requirements for lead auditors, the licensee mentions that this alternative is consistent with the approved alternative for the NMC. The NMC basis for this alternative was taken from the Palisades Quality Program Description, Rev. 21, approved by the staff on April 18, 1997. The approval of this alternative was based on the following requirements: (1) the prospective lead auditor effectively demonstrates ability to lead and implement audit process; (2) the licensee describes the demonstration process in written procedures; and (3) the prospective lead auditor shall have participated in at least one nuclear audit in the last year. In addition, this alternative was based on individuals that have related experience and are capable of demonstrating the ability to lead audits in fewer than five audits. Provide an explanation of your basis for this exception, and how it relates to the approved basis. Note that in order to use this alternative all bases need to be met and the statement must read: “The prospective lead auditor shall demonstrate his/her ability to properly implement the audit process, as implemented accordingly to section C.3 of the QATR, to effectively organize and report results, including participation in at least one nuclear audit within the year preceding the date of qualification.”*

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**FPL Response:**

This exception is taken in the current QAPDs for all FPL plants. In accordance with the NRC Staff's review criteria (i.e., "Current exceptions/alternatives that are already incorporated into existing facility QAPDs do not need to be explained.") no further explanation is required.

To provide additional clarity, the exception under Section A7 was revised to add the word "nuclear" as shown below:

For Supplement 2S-3: ... "including participation in at least one nuclear independent assessment or audit within the year preceding the date of qualification."

**Table Comparing ANSI N18.7-1976/ANS-3.2 to NQA-1-1994 and the FPL QATR**

1. *ANSI N18.7-1976 Sections 4.3.2.1 requires that no more than a minority of members in the independent review body are from operating organization. The independent review function is integrated into the function of the ORG. Provide an explanation of how this provision is captured in the proposed QATR.*

**FPL Response:**

This section pertains to the Off-Site Review function. As described in this submittal, FPL utilizes an alternate approach. This approach utilizes an expanded scope for the onsite review function as described in Appendix A and periodic independent reviews of matters involving safe operation of its fleet as described in Section C.1.

Section C.1 of the QATR states:

"FPL periodically performs independent reviews of matters involving the safe operation of its fleet of nuclear power plants, with a minimum of one such review being conducted for each generating site each year. The review addresses matters that plant and corporate management determine warrant special attention, such as plant programs, performance trends, employee concerns, or matters related to safe plant operations. The review is performed by a team consisting of personnel with experience and competence in the activities being reviewed, but independent (from cost and schedule considerations) from the organizations responsible for those activities. The review is supplemented by outside consultants or organizations as necessary to ensure the team has the requisite expertise and competence. Results are documented and reported to responsible management."

It is considered that this alternate approach provides an equivalent level of review by individuals outside and independent of the operating organization.

St. Lucie Units 1 and 2, Docket Nos. 50-335 and 50-389  
Turkey Point Units 3 and 4, Docket Nos. 50-250 and 50-251  
Seabrook Station, Docket No. 50-443  
Duane Arnold Energy Center, Docket No. 50-331  
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2. *ANSI N18.7-1976 Section 4, Reviews and Audits, requires all proposed procedures or changes thereto that affect nuclear safety to be reviewed under the Plant Safety Review program. Provide an explanation of how this provision is captured in the proposed QATR.*

FPL Response:

In accordance with Appendix A, the ORG reviews written 10CFR50.59/72.48 to verify that changes to procedures do not involve a change in the Technical Specifications or require prior NRC review.

In lieu of ORG review of procedures within the scope of ANSI N18.7-1976, FPL utilizes a qualified reviewer program. Section B.14 describes this as follows:

“Procedures governing generating site activities (see Appendix B) are reviewed by qualified persons, other than the preparer, as designated by the Plant Manager. Such procedure reviews include determination whether additional cross-discipline reviews are required. Only safety related procedures, and procedures important to safety (as important to safety is used in 10 CFR 71 and 72) from the types listed in Appendix B (pages 50-53), require this review.”

3. *ANSI N18.7-1976 Section 4.5 states that “periodic review of the audit program shall be performed by the independent review body or by a management representative at least semiannually...” Provide an explanation of how this provision is captured in the proposed QATR.*

FPL Response:

This is accomplished through one of the following: the Independent Evaluation of QA/QC identified in QATR Section C.3 Table 1, a review performed by a designated management representative, or a review performed by a designated management review body.

To clarify this, the following statement has been added to QATR Section C.3.

“The independent assessment program will be reviewed at least semiannually through one of the following: an Independent Evaluation of QA/QC, review by a designated management representative, or review by a designated management review body.”

4. *ANSI N18.7-1976/ANS-3.2 Section 5.2.15 states that “plant procedures shall be reviewed by an individual knowledgeable in the area affected by the procedure no less frequently than every two years to determine if changes are necessary or desirable.” Provide an explanation of how this provision is captured in the proposed QATR.*

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Turkey Point Units 3 and 4, Docket Nos. 50-250 and 50-251  
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FPL Response:

Alternate commitments to assure that procedures remain current and correct are contained in Section B.14.

Section B.14 states:

“FPL also establishes programmatic procedure preparation, review and usage controls that ensure procedures are technically and administratively correct. These controls ensure that procedures are reviewed when pertinent source material is revised (such as when Technical Specifications are revised), when unusual incidents occur, when plant modifications are made, and when significant deficiencies are identified. Procedures may also be reviewed because industry experience reviews, use during job execution or training, self-assessments or independent assessments identify deficiencies or opportunities for improvement. Revisions are made as necessary.”

Additionally, in accordance with Section C.3 of the QATR, control of procedures is routinely included in audits, which provides additional assurance that procedures remain current and correct. The note to Section C.3 Table 1 indicates that Criteria 5 and 6 are applicable to (included in the scope of) nearly all audits.

Although not included in the NRC approved NMC QATR, in reviewing this RAI, FPL has determined that it would be prudent to add the following commitment to Section B.14.

“Emergency operating procedures, off-normal procedures, and procedures which implement the emergency plan are exercised on the simulator or reviewed at least once every two years and revised as appropriate.”

FPL’s proposed program provides an acceptable alternative to two-year reviews that has been accepted by the NRC in several Licensee QA Programs including for North East Energy Company in a letter from Victor Nerses of the NRC to S. E. Scace of Northeast Nuclear Energy Company dated May 8, 2000.

The following is a discussion on how FPL meets the bases of the SER and, therefore the SER is applicable to FPL.

Staff Guidance (Element 1)

Programmatic controls should specify that all applicable plant procedures will be reviewed following an unusual incident and following any modification to a system.



St. Lucie Units 1 and 2, Docket Nos. 50-335 and 50-389  
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The proposed QATR states:

“FPL also establishes programmatic procedure preparation, review and usage controls that ensure procedures are technically and administratively correct. These controls ensure that procedures are reviewed when pertinent source material is revised (such as when Technical Specifications are revised) when unusual incidents occur, when plant modifications are made, and when significant deficiencies are identified. Procedures may also be reviewed because industry experience reviews, use during job execution or training, self-assessments or independent assessments identify deficiencies or opportunities for improvement. Revisions are made as necessary.”

The Proposed FPL QATR satisfies Element 1.

Staff Guidance (Element 2)

Non-routine procedures (procedures such as emergency operation procedures, off-normal procedures, procedures which implement the emergency plan, and other procedures whose usage may be dictated by an event) should be reviewed at least every two years.

The proposed QATR has been revised to state:

“Emergency operating procedures, off-normal procedures, and procedures which implement the emergency plan are exercised on the simulator or reviewed at least once every two years and revised as appropriate.”

With this change the proposed FPL QATR satisfies Element 2.

**ATTACHMENT 2**

**Markup pages of the revised QATR**

**Florida Power and Light Company, FPL Energy Seabrook, LLC  
and FPL Energy Duane Arnold, LLC– Policy**

**POLICY STATEMENT**

Florida Power and Light Company, FPL Energy Seabrook, LLC, and FPL Energy Duane Arnold, LLC (hereafter referred to collectively as FPL) shall maintain and operate nuclear plants in a manner that will ensure the health and safety of the public and workers. Facilities shall be operated in compliance with the requirements of the Code of Federal Regulations, the applicable Nuclear Regulatory Commission (NRC) Facility Operating Licenses, and applicable laws and regulations of the state and local governments.

The FPL Quality Assurance Program (QAP) described herein and associated implementing documents provide for control of FPL activities that affect the quality of safety related nuclear plant structures, systems, and components. The QAP is also applied to certain quality related equipment and activities that are not safety related, but support safe plant operations, or where other regulatory or industry guidance establishes program requirements.

The Quality Assurance Topical Report (QATR) is the top-level policy document that establishes the manner in which quality is to be achieved and presents FPL's overall philosophy regarding achievement and assurance of quality. Implementing documents assign more detailed responsibilities and requirements and define the organizational interfaces involved in conducting activities within the scope of the QATR. Compliance with the QATR and implementing documents is mandatory for personnel directly or indirectly associated with implementation of the FPL QAP.

The Chief Nuclear Officer is responsible for implementing the QA policy and program. The authority for developing and verifying execution of the program is delegated to the Director Nuclear Assurance.

Signed: \_\_\_\_\_

J. A. Stall

Senior Vice President Nuclear Division and Chief Nuclear Officer, FPL

**Florida Power and Light Company, FPL Energy Seabrook, LLC  
and FPL Energy Duane Arnold, LLC  
Quality Assurance Topical Report**

**FPL-1**

**Revision 0**

Approved By:

\_\_\_\_\_  
Robert J. Acosta  
Director Nuclear Assurance

\_\_\_\_\_  
Date

\_\_\_\_\_  
J. A. Stall  
Senior Vice President Nuclear Division and  
Chief Nuclear Officer, FPL

\_\_\_\_\_  
Date

**Florida Power and Light Company, FPL Energy Seabrook, LLC  
and FPL Energy Duane Arnold, LLC  
Quality Assurance Topical Report**

**A.2 Organization (Continued)**

In establishing its organizational structure, FPL commits to compliance with NQA-1, 1994, Basic Requirement 1 and Supplement 1S-1. Management gives careful consideration to the timing, extent and effects of organizational structure changes.

**A.2.1 Corporate Organization**

The following positions have the described corporate functional responsibilities. Some titles and reporting relationships may vary between corporate and some sites, but in all cases there is a designated position to carry out the defined responsibilities.

**A.2.1.1 FPL Group Chairman and Chief Executive Officer (CEO)**

This position ~~is responsible for overall corporate policy and provides executive direction and guidance for the corporation as well as promulgates~~ promulgation of corporate policy through FPL's senior management staff.

**A.2.1.2 Chief Nuclear Officer (CNO)**

This position reports to the CEO and has overall responsibility for the implementation of the QAP and for the Nuclear Division's activities including corporate responsibility for overall plant nuclear safety. This responsibility includes setting and implementing policies, objectives, and priorities to ensure activities are performed in accordance with QAP and other corporate requirements. The CNO is designated as the Company Officer responsible for assuring that defects and non-compliances are reported to the NRC as required by 10CFR21.

**A.2.1.2.a Vice President Nuclear Operations**

This position reports to the CNO and is responsible for oversight of the day-to-day nuclear site operations, providing direction for each of the nuclear operating units, ensuring the highest standards of nuclear safety and the overall operating efficiencies and cost effectiveness of nuclear generation.

**A.2.1.2.b Vice President Nuclear Operations Support**

This position reports to the CNO and is responsible for nuclear plant operations support via staff at both the corporate and site levels. Responsibilities include security, training, nuclear information technology, performance improvement, operating experience, document control, records management, emergency preparedness, licensing, and fleet standardization. Some of these responsibilities may be assigned to the Site Vice President(s) at the discretion of the CNO.

**A.2.1.2.c Vice President Nuclear Engineering**

This position reports to the CNO and is responsible for nuclear plant design engineering and engineering support via staff at both the corporate and site levels. Responsibilities include engineering, major project engineering, nuclear fuel, probabilistic safety analysis, and special projects.

**Florida Power and Light Company, FPL Energy Seabrook, LLC  
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**A.2 Organization (Continued)**

**A.2.1.2.d Vice President Nuclear Projects**

This position reports to the CNO and is responsible for all activities associated with major projects, O & M and capital from inception to completion, including budget accountability. Responsibilities include overall management and allocation of supplemental labor at each site, both outage and non-outage.

**A.2.1.2.e Vice President Integrated Supply Chain**

This position reports to the CEO through the Senior Vice President Engineering, Construction and Corporate Services and is responsible for procurement engineering; coordinating contract activities; negotiating, generating, and issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection of FPL nuclear plants, and for materials and equipment to support the Nuclear Division staff. Responsibilities also include the review of procurement documents to assure that technical and quality requirements ~~developed by others and approved in accordance with company policies and procedures~~, are incorporated into the procurement documents that it authorizes, performance of receipt inspection to verify that purchased items comply with procurement document requirements (except at stations where receipt inspection is performed by the Quality Assurance Organization), and controlling materials received at each FPL nuclear plant site in accordance with company policy and procedures.

**A.2.1.2.f Director Nuclear Assurance**

This position reports to the CNO and is responsible for activities that include establishing, maintaining, and interpreting quality assurance practices and policies (including this QATR); managing independent assessment (Quality Assurance (QA)) and establishing quality control practices and policies for quality verification activities.

Additional responsibilities include facilitating actions deemed necessary to prevent unsafe plant conditions or a significant violation of the QAP; periodically apprising the CNO of the status of the quality assurance program at FPL facilities and immediately apprising them of significant problems affecting quality; and verifying implementation of solutions for significant conditions adverse to quality identified by QA. Also responsible for establishing the requirements for assessor and inspector certification; and providing for supplier evaluation; the conduct of supplier assessments or surveys; and verification that supplier quality assurance programs comply with FPL requirements. This position entails Stop Work authority at the sites and corporate offices.

**A.2.1.2.g Vice President Information Management**

This position is the FPL Group Chief Information Officer or CIO, and reports to the FPL CEO through the FPL Group Senior Vice President of Finance & Chief Financial Officer (CFO). The CIO is responsible for information management for the Nuclear Division including computer-related hardware and software acquisition, deployment, maintenance, control and replacement; telecommunications; information / cyber security; and applicable training.

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**A.5 Personnel Training and Qualification**

Personnel assigned to implement elements of the QAP must be capable of performing their assigned tasks. To this end, FPL establishes and maintains formal indoctrination and training programs for personnel performing, verifying or managing activities within the scope of the QAP to assure that suitable proficiency is achieved and maintained. Generating site and support staff minimum qualification requirements are as delineated in plant Technical Specifications or other appropriate documents. Other qualification requirements may be established but will not reduce those required by plant Specifications. Sufficient managerial depth is provided to cover absences of incumbents. When required by code, regulation, or standard, specific qualification and selection of personnel is conducted in accordance with those requirements as established in the applicable FPL procedures. Indoctrination may include the administrative and technical objectives, requirements of the applicable codes and standards, and the QAP elements to be employed. Training for positions identified in 10CFR50.120 is accomplished according to programs accredited by the National Nuclear Accrediting Board of the National Academy for Nuclear Training that implements a systematic approach to training. Records of personnel training and qualification are maintained.

In establishing qualification and training programs, FPL commits to compliance with NQA-1, Basic Requirement 2, Supplements 2S-1, 2S-2, 2S-3 and 2S-4, and Non-mandatory Appendix 2A-1 with the following clarifications and exceptions:

- For Supplement 2S-1: Inspections, examinations or tests may be performed by individuals in the same organization as that which performed the work, provided that (a) the qualifications of the inspector for an activity are equal to or better than the minimum qualifications for persons performing the activity, (b) the work is within the skills of personnel and/or is addressed by procedures, and (c) if work involves breaching a pressure-retaining item, the quality of the work can be demonstrated through a functional test. When a, b and c are not met, inspections, examinations or tests are carried out by individuals certified in accordance with Supplement 2S-1. Individuals performing visual inspections required by the ASME Boiler and Pressure Vessel Code are qualified and certified according to Code requirements.
- ~~In lieu of Nonmandatory Appendix 2A-1, FPL does not establish levels of qualification/certification for inspection personnel. Instead, FPL establishes initial qualification requirements and determines individual qualification through evaluation of education, training and experience, and through demonstration of capability in performing the type of inspections expected on the job.~~

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**A.5 Personnel Training and Qualification (Continued)**

- In lieu of being certified as Level I, II or III in accordance with Non-mandatory Appendix 2A-1 of NQA-1-1994, personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities, that are in the same organization as that which performed the work, will be required to possess the same minimum level of qualification as that required for performing the task being verified. The verification shall be within the skills of these personnel and/or is addressed by procedures. Individuals responsible for the planning of such quality verification inspections and tests (i.e. establishing hold points and acceptance criteria in procedures, or determining who will be responsible for performing the inspections) will meet qualification requirements equivalent to those contained in Appendix 2A-1 and suitably trained for the function.
- In lieu of Supplement 2S-2, FPL will follow the applicable standard cited in the latest version(s) of Section XI of the ASME Boiler and Pressure Vessel Code approved by the NRC for use at FPL sites for qualification of nondestructive examination personnel.
- For Supplement 2S-3: The requirement that prospective Lead Auditors have participated in a minimum of five (5) audits in the previous three (3) years is replaced by the following, "The prospective lead auditor shall demonstrate his/her ability to properly implement the independent assessment (audit) process, as implemented by FPL according to Section C.3 of this QATR, to effectively lead an assessment team, and to effectively organize and report results, including participation in at least one nuclear independent assessment or audit within the year preceding the date of qualification." The term "audit" and "independent assessment" are synonymous and may be used interchangeably throughout the QAP.
- For Supplement 2S-3: FPL may apply a 90-day grace period to the requirement for a documented annual evaluation of lead auditor proficiency. When the grace period is applied, the next due date for the activity is based upon the original scheduled date. However, in all cases the periodicity shall not exceed one year plus 90 days.



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**A.6 Corrective Action**

FPL management, at all levels, fosters a non-punitive ("no-fault") attitude toward the identification of conditions adverse to quality. This includes failures, malfunctions, deficiencies, deviations, defective material and equipment, abnormal occurrences, nonconformances, and out-of-control processes, including the failure to follow procedures.

FPL implements a corrective action program to promptly identify, control, document, classify, and correct conditions adverse to quality. In addition, for significant conditions adverse to quality, the program provides for cause evaluation and corrective actions to prevent recurrence. Provisions are also made to ensure that corrective actions for significant conditions adverse to quality are completed as intended and are not inadvertently nullified by subsequent actions. Results of evaluations of conditions adverse to quality are analyzed to identify trends. Significant conditions adverse to quality and significant adverse trends are documented and reported to responsible management.

Prior to installation, nonconforming items are reviewed and accepted, rejected, repaired, or reworked, and are identified and controlled to prevent their inadvertent test, installation or use.

In establishing requirements for corrective action, FPL commits to compliance with NQA-1, 1994, Basic Requirements 15 and 16, and Supplement 15S-1.

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**A.7 Regulatory Commitments (Continued)**

- Safety/Regulatory Guide 1.26, Revision (site specific) “Quality Group Classifications and Standards for Water-, Steam-, and Radioactive Waste-Containing Components of Nuclear Power Plants” – Commitment to Safety/Regulatory Guide 1.26 is site specific, as required by the approved UFSAR/License at each FPL site. Sites may use this guidance to assist in establishing the lists of equipment to which this QAP applies, or for other purposes.
  
- Regulatory Guide 1.28, Revision 3, August 1985, “Quality Assurance Program Requirements (Design and Construction)” (ASME NQA-1, 1983a) – FPL does not commit to comply with position C.1 of this Regulatory Guide for personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities, that are in the same organization as that which performed the work; See the specific exceptions to 2S-1 and 2A-1 contained in Section A.5 of this QATR. ~~instead of establishing three levels of qualification provided in Nonmandatory Appendix 2A-1, FPL establishes initial qualification requirements and determines individual qualification through evaluation of education, training and experience, and through demonstration of capability in performing the types of inspections expected for the job.~~ FPL complies with position C.2 for record retention times, and position C.3.2 for external audits, with the exception that for position C.3.2.2, FPL will review the information described therein as it becomes available through its ongoing receipt inspection, operating experience, and supplier evaluation programs, in lieu of performing a specific evaluation on an annual basis. The results of the reviews are promptly considered for effect on a supplier’s continued qualification and adjustments made as necessary (including corrective actions, adjustments of supplier audit plans, and input to third party auditing entities, as warranted). Additionally, results are reviewed periodically to determine if, as a whole, they constitute a significant condition adverse to quality requiring additional action. In lieu of compliance with Regulatory Position C.3.1, FPL establishes independent assessment frequencies as described in Section C of this QATR. In lieu of NQA-1 1983a, FPL uses NQA-1 1994.
  
- Safety/Regulatory Guide 1.29, Revision (site specific) “Seismic Design Classification” – Some FPL plants were designed, constructed and licensed based on criteria available prior to this Regulatory Guide being issued. The specific design criteria and seismic designations are reflected in each plant’s UFSAR, and in other docketed analysis. Thus, the commitment to Safety/Regulatory Guide 1.29 is site specific, as required by the approved UFSAR/License at each FPL site. Sites may use this guidance to assist in establishing the lists of equipment to which this QAP applies, or for other purposes.

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**A.7 Regulatory Commitments (Continued)**

- Regulatory Guide 1.30, August 1972, "Quality Assurance Requirements for the Installation, Inspection and Testing of Instrumentation and Electric Equipment," (ANSI N45.2.4-1972/IEEE 336-1971) – FPL substitutes NQA-1 1994, Subpart 2.4/IEEE 336-1985 for N45.2.4 in its commitment to Regulatory Guide 1.30. As noted in Regulatory Position C.1, Subpart 2.4 is being used in conjunction with NQA-1, Part 1, which replaced ANSI N45.2. As noted in Regulatory Position C.2, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.4 includes commitment to those standards to the extent necessary to implement Subpart 2.4 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.3 indicates that the requirements of the endorsed standard should also be considered applicable during the operation phase of the nuclear power plant. This is addressed in Sections B.12 and B.16 of this QATR, which also establish any necessary exceptions or alternatives to the provisions of Subpart 2.4.
- Regulatory Guide 1.33, Revision 2, February 1978, "Quality Assurance Program Requirements (Operation)" (N18.7) – NQA-1 contains quality assurance requirements equivalent to those of ANSI N-18.7, and FPL has included in this QATR the remaining "administrative controls" elements from N-18.7 (1976). Therefore, FPL does not commit to compliance with the requirements of ANSI N-18.7. As recommended by Regulatory Position C.1, FPL uses Appendix A of RG 1.33 as guidance in establishing the types of procedures required for plant operation and support. Regulatory Position C.2 is no longer considered valid, as the referenced standards and guidance have now been incorporated into ASME NQA-1 1994, or are addressed specifically in this section. Regulatory Position C.3 does not apply since FPL does not use independent/offsite review. However, Appendix A to the QATR specifies the expanded scope of review for the On-Site Review Group which includes proposed changes to Operating License and Technical Specifications. In lieu of compliance with Regulatory Position C.4, FPL establishes assessment topics and frequencies as described in Section C.3 of this QATR. In lieu of compliance with Regulatory Position C.5, FPL has established appropriate equivalent requirements within this QATR.
- Regulatory Guide 1.36, Revision 0, February 1973, "Nonmetallic Thermal Insulation for Austenitic Stainless Steel" – Some of the current FPL plants were committed to this Regulatory Guidance during original construction. Regulatory Guide 1.36 may be used for plant modifications on a case by case basis, but this QATR makes no generic commitment thereto.

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**A.7 Regulatory Commitments (Continued)**

- Regulatory Guide 1.39, Revision 2, September 1977, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants," (ANSI N45.2.3-1973) – FPL substitutes NQA-1 1994, Subpart 2.3 for N45.2.3 in its commitment to Regulatory Guide 1.39. As noted in Regulatory Position C.1, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.3 includes commitment to those standards to the extent necessary to implement Subpart 2.3 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.2 indicates that the provisions of section 3.2.3 of N45.2.3 are not part of the Regulatory endorsement. As NQA-1, Subpart 2.3, section 3.2.3 has the same wording as N45.2.3, the Regulatory Position is applicable and will be followed in FPL's implementation of Subpart 2.3. Regulatory Position C.3 indicates that the endorsed standard is "applicable for housekeeping activities during the operations phase that are comparable to those occurring during construction." This is addressed in Section B.7 of this QATR that also establishes any necessary exceptions or alternatives to the provisions of Subpart 2.3.
- Regulatory Guide 1.54, Revision 0, June 1973, "Quality Assurance for Protective Coatings Applied to Nuclear Power Plants" (N101.4-1972) - Commitment to Regulatory Guide 1.54 is site specific, as required by the approved UFSAR/License at each FPL site.
- Regulatory Guide 1.94, Revision 1, April 1976, "Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants," (ANSI N45.2.5-1974) – FPL substitutes NQA-1 1994, Subpart 2.5 for N45.2.5 in its commitment to Regulatory Guide 1.94; however, Subpart 2.5 includes requirements for soils and foundations which were not included in N45.2.5, and the commitment to Subpart 2.5 herein does not include commitment to those requirements. As noted in Regulatory Position C.1, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.5 includes commitment to those standards to the extent necessary to implement Subpart 2.5 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.2 recommends using the general planning provisions of N45.2.5 in conjunction with Regulatory Guide 1.55, which has since been withdrawn; therefore, this position is no longer applicable. Regulatory Positions C.3 and C.4 recommend alterations to certain provisions of N45.2.5. The provisions of NQA-1, Subpart 2.5 are consistent with those recommendations. Applicability and use of Subpart 2.5 is addressed in Sections B.12 and B.16 of this QATR, which also establish any necessary exceptions or alternatives to the provisions of Subpart 2.5.
- Regulatory Guide 1.97, Revision 3, May 1983, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident" (Table 1, paragraph 5) – In lieu of the Regulatory Guides listed in the Table, FPL commits to the Regulatory Guidance and industry standards for quality assurance as described in this QATR. Commitment to the technical provisions of Regulatory Guide 1.97 is site specific as addressed in each plant UFSAR or other licensing commitments.

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**A.7 Regulatory Commitments (Continued)**

- Regulatory Guide 1.116, Revision 0-R, May 1977, "Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems," (ANSI N45.2.8-1975) – FPL substitutes NQA-1 1994, Subpart 2.8 for N45.2.8 in its commitment to Regulatory Guide 1.116. As noted in Regulatory Position C.1, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.8 includes commitment to those standards to the extent necessary to implement Subpart 2.8 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.3 recommends using section 5 of N45.2.8 in conjunction with Regulatory Guide 1.68 for pre-operational, cold functional, and hot functional testing. While section 5 of NQA-1, Subpart 2.8 provides the same requirements, it is anticipated that FPL plants, since they are already beyond these tests, will not need to implement Regulatory Guide 1.68. If testing in accordance with Regulatory Guide 1.68 becomes necessary, FPL will comply with the guidance of the Regulatory Guide 1.116 position. Regulatory Position C.2 indicates that the endorsed standard should be "followed for those applicable operations phase activities that are comparable to activities occurring during the construction phase." This is addressed in Sections B.12 and B.16 of this QATR, which also establish any necessary exceptions or alternatives to the provisions of Subpart 2.8.
- Regulatory Guide 1.143, Revision 2, November 2001, "Design Guidance for Radioactive Waste Management Systems, Structures and Components Installed in Light-Water-Cooled Nuclear Power Plants" (Position C.7) – FPL meets the intent of the quality assurance guidance cited in Position C.7. Compliance with the remainder of the [technical] positions of Regulatory Guide 1.143 is site specific, as addressed in each plant UFSAR.
- Regulatory Guide 1.152, Revision 1, January 1996, "Criteria for Digital Computers in Safety Systems of Nuclear Power Plants" – None of the current FPL plants were committed to this Regulatory Guidance during original construction. Regulatory Guide 1.152 may be used for plant modifications on a case by case basis, but this QATR makes no generic commitment thereto.
- Regulatory Guide 1.155, Revision 0, August 1988, "Station Blackout" (Position C.3.5) - FPL meets assurance guidance cited in Position C.3.5, Appendix A. Compliance with Appendix B and the remainder of the [technical] positions of Regulatory Guide 1.155 is site specific, as addressed in each plant UFSAR or License commitments.
- Generic Letter 89-02/EPRI-NP-5652 (March 1988, and supplements through March 1993) – FPL commits to compliance with the endorsed industry guidance regarding selection and qualification of commercial grade suppliers and dedication of commercial grade items for use in safety related applications.
- Generic Letter 91-05 (April 1991) – FPL commits to compliance with the guidance regarding licensee commercial-grade procurement and dedication programs.

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**A.7 Regulatory Commitments (Continued)**

- Branch Technical Position CMEB 9.5-1, Revision 2, July 1981 (Positions C.2 and C.4) – FPL provisions for administrative controls for Fire Protection comply with site specific commitments, or with the provisions of Position C.2 of CMEB 9.5-1, Rev. 2, as specified in NRC approved site fire protection programs and the applicable NRC Safety Evaluation Reports. Application of the provisions of this QATR to fire protection activities provides elements of quality assurance that comply with site specific fire protection quality assurance commitments or with CMEB 9.5.1, Revision 2, Position C.4.
- Regulatory Guide 4.15, Revision 1, February 1979, “Quality Assurance for Radiological Monitoring Programs (Normal Operations) – Effluent Streams and the Environment” – FPL meets the intent of Regulatory Guide 4.15.
- Regulatory Guide 7.10, Revision 2, March 2005, “Establishing Quality Assurance Programs for Packaging Used in the Transport of Radioactive Material” – FPL commits to implement the quality assurance guidance for activities related to the packaging and transport of radioactive material that are under its control. Quality Assurance for the design, fabrication and licensing of shipping containers is the responsibility of the container certificate holders.
- Generic Letter 85-06, April 1985, “Quality Assurance Guidance for ATWS Equipment That Is Not Safety-Related” – FPL commits to the quality assurance guidance cited in the Generic Letter.
- Regulatory Issue Summary 2000-18, October 2000, “Guidance on Managing Quality Assurance Records in Electronic Media” – In instances when FPL chooses electronic media storage as a means of maintaining required records, FPL will comply with the guidance of this Regulatory Issue Summary.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

- When purchasing commercial grade calibration services from a supplier that has been accredited by a nationally recognized accrediting body. (NAVLAP or other accrediting body recognized by NAVLAP via a Mutual Recognition Agreement (MRA)), FPL may accept the accreditation in lieu of performing an audit, accepting an audit by another licensee or conducting a commercial grade survey. In order to accept the accreditation FPL will perform a documented review of the supplier's accreditation. The review shall, as a minimum, verify all of the following:

(a) The accreditation is to ANSI/ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories."

(b) The accrediting body is NVLAP (National Voluntary Laboratory Accreditation Program) or A2LA (American Association for Laboratory Accreditation).

(c) The published Scope of Accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.

In establishing controls for procurement, FPL commits to compliance with NQA-1, 1994, Basic Requirements 4 and 7, and Supplements 4S-1 and 7S-1, with the following exceptions:

- For Supplement 4S-1, Section 2.3, which requires procurement documents to require a quality program that complies with NQA-1, FPL may apply other nationally recognized and NRC endorsed quality standards, such as N45.2, as appropriate to the circumstances of the procurement. ~~and may also elect to purchase items or services commercially available and then dedicate them for safety related service per Generic Letter 89-02/EPRI NP-5652.~~
- For Supplement 7S-1, Section 8.1, documentary evidence that items conform to procurement requirements need not be available at the site prior to item installation, but will be available at the site prior to placing reliance on the item for its intended safety function.
- For Supplement 4S-1 and Supplement 7S-1, FPL will use the guidance contained in Generic Letter 89-02/EPRI NP-5652 and Generic Letter 91-05 to procure Commercial Grade Items in lieu of these requirements.
- For commercial grade calibration services from a supplier that has been accredited by a nationally recognized accrediting body (NAVLAP or other accrediting body recognized by NAVLAP via a Mutual Recognition Agreement (MRA)), FPL may accept the service subject to the restrictions noted in Section B.4 above instead of Supplement 4S-1 and Supplement 7S-1.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

In establishing provisions for identification and control of items, FPL commits to compliance with NQA-1, 1994, Basic Requirement 8 and Supplement 8S-1.

**B.7 Handling, Storage and Shipping**

FPL establishes and implements provisions to control the handling, storage, shipping, cleaning and preservation of items to prevent inadvertent damage, loss or deterioration. These provisions include specific procedures, when required to maintain acceptable quality, for cleaning, handling, storage, packaging, shipping and preserving items important to safety. Items are appropriately marked and labeled during packaging, shipping, handling and storage to identify, maintain and preserve the item's integrity and indicate the need for special controls. Special controls (such as containers, shock absorbers, accelerometers, inert gas atmospheres, specific moisture content levels and temperature levels) are provided when required to maintain acceptable quality.

In establishing provisions for handling, storage and shipping, FPL commits to compliance with NQA-1, 1994, Basic Requirement 13 and Supplement 13S-1. FPL also commits to compliance with the requirements of NQA-1, 1994, Subpart 2.2, with the following exceptions:

- Subpart 2.2, Section 2.2 establishes criteria for classifying items into protection levels. Instead of classifying items into protection levels, FPL plants may establish controls for the packaging, shipping, handling and storage of such items on a case-by-case basis with due regard for the item's complexity, use, and sensitivity to damage. Prior to installation or use, the items are inspected and serviced as necessary to assure that no damage or deterioration exists which could affect their function.
- Subpart 2.2, Section 5.2.2 requires receiving inspections be performed in an area equivalent in environmental controls to those for the level of storage of the item. At FPL plants, receiving inspection area environmental controls may be less stringent than the storage environmental requirements for the item. Such inspections are performed in a manner and in an environment which does not endanger the required quality of the item.
- Subpart 2.2, Section 6.2.4 states that the use or storage of food, drinks, and salt tablet dispensers in controlled storage areas shall not be permitted. FPL takes exception to the wording of Section 6.2.4 and substitutes an alternate requirement that the use or storage of food, drinks, and salt tablet dispensers in any storage area shall be controlled and be limited to designated areas where such use or storage is not deleterious to the stored items.



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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

**B.13 Corrective Action**

FPL establishes and implements provisions to assure that personnel have both the responsibility and authority to identify conditions adverse to quality, and the opportunity to suggest, recommend or provide solutions to resolve the condition. Provisions also include verification of resolution of significant issues (see also Section A.6).

Reworked, repaired and replacement items are inspected and tested to meet the original inspection or test requirements, or appropriately specified alternatives (see also Sections B.8 and B.12).

If evidence indicates that common components in safety related systems have performed unsatisfactorily, compensatory or corrective measures are planned prior to replacement or repair of such components. Replacement components receive adequate testing or are of a design for which experience indicates a high probability of satisfactory performance. Consideration is given to phased replacement to permit inservice performance to be evaluated and minimize the possibility of systemic failure.

In establishing provisions for corrective action and control of nonconforming items, FPL commits to compliance with NQA-1, 1994, Basic Requirements 15 and 16, and Supplement 15S-1.

**B.14 Document Control**

FPL establishes and implements provisions to specify the format and content (see Appendix B for procedures), and control the development, review, approval, issue, use and revision, of documents that specify quality requirements or prescribe activities affecting quality or safe operation to assure the correct documents are being employed. These provisions assure that specified documents are reviewed for adequacy, approved prior to use by authorized persons, and distributed according to current distribution lists and used at the location where the prescribed activity takes place. Procedures governing generating site activities (see Appendix B) are reviewed by qualified persons, other than the preparer, as designated by the Plant Manager. Such procedure reviews include determination whether additional cross-discipline reviews are required. Only safety related procedures, and procedures important to safety as used in 10CFR71 and 72, from the types listed in Appendix B (Pages 44-44 50 – 53), require this review. Provisions include establishing levels of use, such as requiring the document to be present at the work location. Documents subject to control provisions include, but are not limited to, drawings (design, as-built), engineering documents (calculations, analyses, specifications, computer codes, Updated Final Safety Analysis Reports, Plant Technical Specifications), and procedures (administrative, operating, emergency operating, maintenance, calibration, surveillance, inspection, test). Other documents, such as those related to procurement, corrective actions, and assessments, are controlled as defined by the provisions and commitments cited in those sections of this QATR. Controlled copies of instructions and procedures are made available to and used by the persons performing the activity covered. New or revised controlled documents are made available in a timely fashion to support ongoing work and preclude use of incorrect information. Superseded documents are

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

identified or removed from availability. Each site maintains documentation that describes how implementing documents are maintained to assure that QAP requirements are met and are not inadvertently removed in later revisions.

Revisions to controlled documents are reviewed for adequacy and approved for release by the same organization(s) as originally did so, or by other designated organizations that are qualified and sufficiently knowledgeable of the requirements and intent of the original document. FPL also establishes programmatic procedure preparation, review and usage controls that ensure procedures are technically and administratively correct. These controls ensure that procedures are reviewed when pertinent source material is revised (such as when Technical Specifications are revised), when unusual incidents occur, when plant modifications are made, and when significant deficiencies are identified. Procedures may also be reviewed because industry experience reviews, use during job execution or training, self-assessments or independent assessments identify deficiencies or opportunities for improvement. Revisions are made as necessary. Emergency operating procedures, off-normal procedures, and procedures which implement the emergency plan are exercised on the simulator or reviewed at least once every two years and revised as appropriate.

Temporary changes to approved procedures that do not change the intent are approved by two members of plant staff knowledgeable in the areas affected by the procedure. ~~Temporary changes to procedures identified in Appendix B are approved by two members of plant staff knowledgeable in the areas affected by the procedure, at least one of whom is a person holding a senior reactor operator's license. Additionally for temporary changes to approved procedures identified in Appendix B of this QATR, at least one of the two approvers must hold a senior reactor operator's license. Temporary changes are documented, reviewed by the ORG or by a qualified reviewer, and approved by the designated approval authority within 14 days of implementation. Temporary changes are documented and, if appropriate, incorporated~~ temporary changes are incorporated in the next revision of the procedure.

In establishing provisions for document control, FPL commits to compliance with NQA-1, 1994, Basic Requirement 6 and Supplement 6S-1.

**B.15 Records**

FPL establishes and implements provisions to ensure that sufficient records of items and activities affecting quality are generated and maintained to reflect completed work. Such records may include, but are not limited to, design, engineering, procurement, manufacturing, construction, inspection, test, installation, modification, operations, maintenance, corrective action, assessment, and associated reviews. The provisions establish requirements for records administration, including generation, receipt, preservation, storage, safekeeping, retrieval and final disposition. For activities governed by 10CFR71 or 72, these provisions address the specific requirements of sections 71.135 and 72.174.

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**C. ASSESSMENT (CONTINUED)**

**C.2 Self-assessment**

FPL uses self-assessments performed by or for the group responsible for the activity being assessed to identify anomalous performance and precursors of potential problems. When line organizations perform self-assessments, their focus is technically and performance oriented with focus on the quality of the end product as well as on compliance with procedures and processes. The objective of self-assessment is to verify compliance, improve performance and achieve excellence. Results of self-assessments are reported in an understandable form and in a timely fashion to a level of management having the authority to effect corrective action and verify satisfactory resolution of problems.

**C.3 Independent Assessment**

FPL has established a program of planned and periodic performance-based independent assessments to monitor overall performance and confirm that activities affecting quality comply with the QAP and that the QAP is effectively implemented. The organization performing independent assessment (Quality Assurance) is technically and performance oriented, with its focus on the quality of the end product and the effective implementation of procedures and processes. Persons performing independent assessments do not have direct responsibility for any area being assessed, and do not report to a management position with immediate responsibility for the activity being assessed. FPL assessment resources may be supplemented with technical specialists as needed. The independent assessment program will be reviewed at least semiannually through one of the following: an Independent Evaluation of QA/QC, review by a designated management representative, or review by a designated management review body.

The independent assessment program provides comprehensive independent evaluations of activities and procedures. Planning for independent assessments identifies the characteristics and activities to be assessed and the relevant performance and/or acceptance criteria. As appropriate to the scope of an assessment, these criteria include related plant Technical Specification requirements. Independent assessments are then conducted using these predetermined criteria. Scheduling and resource allocation for independent assessments are based on the status, performance, and effect on safety of the activity or process (topic) being assessed. Scheduling is dynamic to provide for response to developing performance issues and resources are supplemented as necessary when QAP effectiveness is in question. Activities having immediate effect on safety, such as operations or maintenance, are independently assessed on a routine basis.

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**Appendix A: On-Site Review Group (Continued)**

The ORG reviews at least the following:

- (1) Changes to the Offsite Dose Calculation Manual (OCDM) and the Process Control Program (PCP). In addition, changes to Radwaste Treatment Systems are reviewed for St. Lucie and Seabrook Plants.
- (2) Proposed tests or experiments that affect nuclear safety.
- (3) Proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- (4) Written 10CFR50.59/72.48 evaluations to verify that changes to the facility or procedures, tests or experiments do not involve a change in the Technical Specifications or require prior NRC review.
- (5) Proposed changes to Operating License and Technical Specifications.
- (6) Reports covering violations of applicable NRC statutes, codes, regulations, orders, Technical Specifications, or license requirements or of internal documents having nuclear safety significance.
- (7) Reports of special reviews and investigations as requested by the Site Vice President, Site Director, or plant manager.
- (8) Events reportable in writing to the NRC according to applicable regulations.
- (9) Reports of significant operating abnormalities or deviations from the normal and expected performance of plant equipment or systems that affect nuclear safety.
- (10) All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
- (11) Review of any accidental, unplanned, or uncontrolled radioactivity release.
- (12) Any other matter related to nuclear safety requested by the Site Vice President, Site Director or plant manager, selected by ORG members, or referred to the ORG by other site or corporate organizations.
- (13) Review of Diesel Fuel Oil Testing Program and implementing procedures (Turkey Point Only)

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**Appendix A: On-Site Review Group (Continued)**

- (14) Review and documentation of judgment concerning prolonged operation in bypass, channel trip, and/or repair of defective protection channels of process variables placed in bypass since the last ORG meeting. (St. Lucie only)

Reviews of Items (6) through (44 12) include results of any investigations made and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.”

**5.0 Authority**

The ORG:

- Recommends in writing to the plant manager approval or disapproval of items reviewed.
- Renders determinations in writing with regards to whether Items (1) through (5), or changes thereto, require prior NRC approval in accordance with 10CFR50.59/72.48.
- Provides written notification to level(s) above the plant manager of any disagreements between the ORG and the plant manager.

The ORG shall advise the plant manager on matters related to safe operation and overall performance. The ORG has authority to obtain access to records and personnel as needed to conduct reviews.

In carrying out its review responsibilities, the ORG may establish subcommittees or use designated organizational units to carry out the review. The subcommittees or organizational units must regularly report results of reviews for full committee consideration and may recommend items for full committee review as warranted.

**6.0 Records**

The ORG maintains written minutes of each ORG meeting, to include identification of items reviewed, and decisions and recommendations of the Committee. Copies of the minutes are provided to the on-site and off-site management position(s) above the plant manager, and to other management responsible for the areas reviewed as necessary. ORG records are retained according to Section B.15.

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**Appendix C: Definitions**

FPL uses the definitions of terms as provided in Section 4 of the Introduction of NQA-1 1994 in interpreting the requirements of NQA-1 and other standards to which the QATR commits. In addition, definitions are provided for the following terms not covered in NQA-1:

**Administrative Controls:** Rules, orders, instructions, procedures, policies, practices and designations of authority and responsibility.

**Emergency Procedures:** See Appendix B.

**Experiments:** performance of plant operations carried out under controlled conditions in order to establish characteristics or values not previously known.

**Independent Assessment:** Planned and documented activity performed to determine by investigation, examination, observation, or evaluation of objective evidence the adequacy of and compliance with established procedures, instructions, drawings, and other applicable documents, and to determine the effectiveness of implementation. Independent Assessment, as used in this QATR, is considered equivalent to the term "audit".

**Independent Review:** Review completed by personnel not having direct responsibility for the work function under review whether they operate as part of an organizational unit or individual staff members (see Review).

**Maintenance and Modification Procedures:** Written procedures defining the policies and practices by which structures, mechanical, electrical and instrumentation and control systems, and components thereof, are kept in a condition of good repair or efficiency so that they are capable of performing their intended functions.

**Nuclear Power Plant:** Any plant using a nuclear reactor to produce electric power, process steam or space heating.

**Off normal Condition Procedures:** Written procedures which specify operator actions for restoring an operating variable to its normal controlled value when it departs from its range, or to restore normal operating conditions following a perturbation. Such actions are invoked following an operator observation or an annunciator alarm indicating a condition which, if not corrected, could degenerate into a condition requiring action under an emergency procedure. (May be called Abnormal, Off-normal or other term conveying the same intent)

**On-site Operating Organization:** On-site personnel concerned with the operation, maintenance and certain technical services.

ATTACHMENT 3

FPL QATR



Florida Power and Light Company,  
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and  
FPL Energy Duane Arnold, LLC

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FPL-1



**Florida Power and Light Company, FPL Energy Seabrook, LLC  
and FPL Energy Duane Arnold, LLC– Policy**

**POLICY STATEMENT**

Florida Power and Light Company, FPL Energy Seabrook, LLC, and FPL Energy Duane Arnold, LLC (hereafter referred to collectively as FPL) shall maintain and operate nuclear plants in a manner that will ensure the health and safety of the public and workers. Facilities shall be operated in compliance with the requirements of the Code of Federal Regulations, the applicable Nuclear Regulatory Commission (NRC) Facility Operating Licenses, and applicable laws and regulations of the state and local governments.

The FPL Quality Assurance Program (QAP) described herein and associated implementing documents provide for control of FPL activities that affect the quality of safety related nuclear plant structures, systems, and components. The QAP is also applied to certain quality related equipment and activities that are not safety related, but support safe plant operations, or where other regulatory or industry guidance establishes program requirements.

The Quality Assurance Topical Report (QATR) is the top-level policy document that establishes the manner in which quality is to be achieved and presents FPL's overall philosophy regarding achievement and assurance of quality. Implementing documents assign more detailed responsibilities and requirements and define the organizational interfaces involved in conducting activities within the scope of the QATR. Compliance with the QATR and implementing documents is mandatory for personnel directly or indirectly associated with implementation of the FPL QAP.

The Chief Nuclear Officer is responsible for implementing the QA policy and program. The authority for developing and verifying execution of the program is delegated to the Director Nuclear Assurance.

Signed: \_\_\_\_\_  
J. A. Stall  
Senior Vice President Nuclear Division and Chief Nuclear Officer FPL

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**FPL-1**

**Revision 0**

Approved By:

\_\_\_\_\_  
Robert J. Acosta  
Director Nuclear Assurance

\_\_\_\_\_  
Date

\_\_\_\_\_  
J. A. Stall  
Senior Vice President Nuclear Division and  
Chief Nuclear Officer, FPL

\_\_\_\_\_  
Date

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Quality Assurance Topical Report**

**INTRODUCTION**

The FPL Quality Assurance Topical Report (QATR) describes the methods and establishes quality assurance program and administrative control requirements which comply with the criteria of 10 CFR 50 Appendix B, and meets the requirements of Regulatory Guides and Industry Standards referenced in Section A.7 of this report. The Topical Quality Requirements and attached Policy Statement, together with Quality Instructions document the Program and the FPL policy with regard to Quality Assurance. This Program shall apply to St. Lucie Nuclear Plant, Turkey Point Nuclear Plant, Seabrook Station, and Duane Arnold Energy Center and shall be implemented at each plant site throughout the operating life of these FPL nuclear plants.

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

This QATR is organized and formatted to respond to NRC Standard Review Plan (NUREG-0800) Section 17.3 (Revision 0 – August 1990). FPL has chosen this approach because it best represents the FPL commitment to the philosophy that each individual, properly trained and motivated, achieves the highest quality of performance of which they are capable. In addition, FPL uses this emphasis on individual performance to reinforce the importance of self-assessments (by the group responsible for the activity) and independent assessments (by groups not responsible for the activity) to achieving excellence.

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**A. MANAGEMENT**

**A.1 Methodology**

The Quality Assurance Topical Report (QATR) is the top-level policy document that establishes quality policy and assigns major functional responsibilities for plants operated by FPL. The following requirements apply to all organizations and positions that manage and perform activities within FPL's scope. The FPL organization is committed to implementing these requirements. FPL personnel engaged in supporting nuclear generation shall comply with the requirements of the Quality Assurance Program (QAP) described in this QATR. Contractors, or other organizations supporting FPL are required to comply with the QAP established by this QATR, or with their own programs having appropriate scope and controls in accordance with Section A.2. All facilities shall be operated in compliance with the applicable Code of Federal Regulations, NRC Operating Licenses, and the applicable laws and regulations of the state and local governments in which the facility is located.

The FPL QAP comprises those planned and systematic actions necessary to provide adequate confidence that structures, systems, and components will perform their intended safety functions. The QAP consists of the NRC approved regulatory document that describes the quality assurance program elements (the QATR) along with the associated quality instructions. Quality instructions establish responsibilities and authority for carrying out important functions; establish common practices for certain activities such that the activity is controlled and carried out in a manner that meets QAP requirements; and establish detailed implementation requirements and methods. In addition, to provide a clear understanding of FPL operating philosophy, FPL establishes rules of practice pertaining to personnel conduct and control, including consideration of job related factors which can influence the effectiveness of operating and maintenance personnel, including such factors as number of hours at duty station, availability on-call of professional and supervisory personnel, methods of conducting operations, and preparing and retaining plant documents. Such rules are contained within appropriate implementing documents.

The QAP applies to activities affecting the performance of safety related structures, systems and components, including, but not limited to, design; procurement; fabrication; installation; modification; maintenance; repair; refueling; operation; training, inspection; and tests. A list, or other means of identification, of safety related Systems, Structures, and Components (SSC) under the control of the QAP is established and maintained for each operating plant. The technical aspects of the items are considered when determining program applicability, including, as applicable, the item's design safety function, results of probabilistic safety analysis, the ASME Code and the other references cited in Section A.7.3 of this QATR. The QAP is also applied to certain activities where regulations other than 10CFR50 establish QA program requirements for activities within their scope. Thus, the QATR is applied to the "important to safety" activities of radioactive waste shipping and independent spent fuel storage, as defined in those NRC regulations, as allowed by 10CFR71.101.f and 10CFR72.140.d.

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**A.1. Methodology (Continued)**

It is FPL's policy to assure a high degree of availability and reliability of its nuclear plants while ensuring the health and safety of the public and its workers. To this end, selected elements of the Quality Assurance Program are also applied to certain quality related equipment and activities that are not safety related, but support safe and reliable plant operations, or where other regulatory or industry guidance establishes program requirements. This quality related classification is applied to selected equipment, components, structures and services designed to support and/or protect the safety function of safety related equipment. Additionally, FPL applies selected elements of the Quality Assurance Program to emergency preparedness, security, radiation protection, and fire protection activities. Implementing documents establish program element applicability.

Activities affecting quality are prescribed by and performed in accordance with documents (such as instructions, procedures or drawings) of a type appropriate to the circumstances and which, where applicable, include quantitative or qualitative acceptance criteria. Such documents are prepared and controlled according to Section B.14. In addition, means are provided for dissemination to plant staff of instructions of both general and continuing applicability (e.g., dealing with job turnover and relief, designation of confines of the control room, limitations on access to certain areas), as well as those of short-term applicability (e.g., dealing with short-term operating conditions, publications, personnel actions). Provisions are included for review, updating, and cancellation of such instructions.

In establishing, implementing and maintaining the QATR, FPL commits to compliance with ASME NQA-1, 1994, Basic Requirement 2. QATR revisions are reviewed by FPL senior management and approved by the Director Nuclear Assurance. Changes to this QATR will be governed by and made in compliance with 10CFR50.54(a).

In establishing procedural controls, FPL commits to compliance with NQA-1, 1994, Basic Requirement 5. In addition, as stated in Position C.1 of Regulatory Guide 1.33, Revision 2, FPL commits to use Appendix A of Regulatory Guide 1.33 as guidance for establishing the types of procedures that are necessary to control and support plant operation. Requirements specific to procedures are also provided in Appendix B of this QATR.

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**A.2 Organization**

This section describes the FPL organizational structure, functional responsibilities, levels of authority and interfaces for establishing, executing, and verifying QAP implementation. The organizational structure includes corporate functions and onsite functions at each plant. Implementing documents assign more specific responsibilities and duties, and define the organizational interfaces involved in conducting activities and duties within the scope of this QATR.

The Chief Nuclear Officer FPL has overall responsibility for establishing quality policy and implementation of the quality program. The authority to accomplish quality assurance functions is delegated to the staff as necessary to fulfill the identified responsibilities.

Personnel executing performance activities and those performing verification activities are functionally independent to the degree commensurate with the activity's relative importance to safety. The method and extent of verification is commensurate with importance of the activity to plant safety and reliability. The organization executing independent assessment activities maintains independence from the organization(s) performing the activity being assessed. Management positions are established both offsite and onsite for carrying out the independent assessment functions. Individuals filling these positions:

- Have sufficient authority and organizational freedom to implement their assigned responsibilities, including authority to obtain access to records and personnel as needed to perform assessments.
- Report to a sufficiently high management level to ensure that cost and schedule considerations do not unduly influence decision making.
- Have effective lines of communication with persons in other senior management positions.
- Have no unrelated duties or responsibilities that would preclude full attention to assigned responsibilities.

Responsible individuals or organizations may delegate any or all of their responsibility. When work is delegated to personnel or organizations outside of FPL the responsibility for the program effectiveness and the work is retained by FPL, and the delegation shall be identified and described such that:

- The organizational elements responsible for the work are identified.
- Management controls and lines of communication are established.
- Responsibility for an appropriate QAP and extent of FPL management oversight is established.
- Performance of delegated work is formally evaluated by FPL.

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**A.2 Organization (Continued)**

In establishing its organizational structure, FPL commits to compliance with NQA-1, 1994, Basic Requirement 1 and Supplement 1S-1. Management gives careful consideration to the timing, extent and effects of organizational structure changes.

**A.2.1 Corporate Organization**

The following positions have the described corporate functional responsibilities. Some titles and reporting relationships may vary between corporate and some sites, but in all cases there is a designated position to carry out the defined responsibilities.

**A.2.1.1 FPL Group Chairman and Chief Executive Officer (CEO)**

This position provides executive direction and guidance for promulgation of corporate policy through FPL's senior management staff.

**A.2.1.2 Chief Nuclear Officer (CNO)**

This position reports to the CEO and has overall responsibility for the implementation of the QAP and for the Nuclear Division's activities including corporate responsibility for overall plant nuclear safety. This responsibility includes setting and implementing policies, objectives, and priorities to ensure activities are performed in accordance with QAP and other corporate requirements. The CNO is designated as the Company Officer responsible for assuring that defects and non-compliances are reported to the NRC as required by 10CFR21.

**A.2.1.2.a Vice President Nuclear Operations**

This position reports to the CNO and is responsible for oversight of the day-to-day nuclear site operations, providing direction for each of the nuclear operating units, ensuring the highest standards of nuclear safety and the overall operating efficiencies and cost effectiveness of nuclear generation.

**A.2.1.2.b Vice President Nuclear Operations Support**

This position reports to the CNO and is responsible for nuclear plant operations support via staff at both the corporate and site levels. Responsibilities include security, training, nuclear information technology, performance improvement, operating experience, document control, records management, emergency preparedness, licensing, and fleet standardization. Some of these responsibilities may be assigned to the Site Vice President(s) at the discretion of the CNO.

**A.2.1.2.c Vice President Nuclear Engineering**

This position reports to the CNO and is responsible for nuclear plant design engineering and engineering support via staff at both the corporate and site levels. Responsibilities include engineering, major project engineering, nuclear fuel, probabilistic safety analysis, and special projects.



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**A.2 Organization (Continued)**

**A.2.1.2.d Vice President Nuclear Projects**

This position reports to the CNO and is responsible for all activities associated with major projects, O & M and capital from inception to completion, including budget accountability. Responsibilities include overall management and allocation of supplemental labor at each site, both outage and non-outage.

**A.2.1.2.e Vice President Integrated Supply Chain**

This position reports to the CEO through the Senior Vice President Engineering, Construction and Corporate Services and is responsible for procurement engineering; coordinating contract activities; negotiating, generating, and issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection of FPL nuclear plants, and for materials and equipment to support the Nuclear Division staff. Responsibilities also include the review of procurement documents to assure that technical and quality requirements are incorporated into the procurement documents that it authorizes, performance of receipt inspection to verify that purchased items comply with procurement document requirements (except at stations where receipt inspection is performed by the Quality Assurance Organization), and controlling materials received at each FPL nuclear plant site in accordance with company policy and procedures.

**A.2.1.2.f Director Nuclear Assurance**

This position reports to the CNO and is responsible for activities that include establishing, maintaining, and interpreting quality assurance practices and policies (including this QATR); managing independent assessment (Quality Assurance (QA)) and establishing quality control practices and policies for quality verification activities.

Additional responsibilities include facilitating actions deemed necessary to prevent unsafe plant conditions or a significant violation of the QAP; periodically apprising the CNO of the status of the quality assurance program at FPL facilities and immediately apprising them of significant problems affecting quality; and verifying implementation of solutions for significant conditions adverse to quality identified by QA. Also responsible for establishing the requirements for assessor and inspector certification; and providing for supplier evaluation; the conduct of supplier assessments or surveys; and verification that supplier quality assurance programs comply with FPL requirements. This position entails Stop Work authority at the sites and corporate offices.

**A.2.1.2.g Vice President Information Management**

This position is the FPL Group Chief Information Officer or CIO, and reports to the FPL CEO through the FPL Group Senior Vice President of Finance & Chief Financial Officer (CFO). The CIO is responsible for information management for the Nuclear Division including computer-related hardware and software acquisition, deployment, maintenance, control and replacement; telecommunications; information / cyber security; and applicable training.

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**A.2 Organization (Continued)**

**A.2.2 Site Organization**

The following site FPL management positions describe the typical site QAP functional responsibilities, which may be delegated to others as established in this document. The on-site operating organization includes one or more individuals knowledgeable in the following fields: nuclear power plant operation; nuclear power plant mechanical, electrical and electronic systems; nuclear engineering; chemistry and radiochemistry; radiation protection; and quality assurance. Some functions, such as operating experience, document control, or records management, may be aligned under different groups at different sites. Site procedures provide detailed organizational descriptions.

**A.2.2.1 Site Vice President (SVP)**

This position reports to the Vice President Nuclear Operations and is responsible for the operation, maintenance, and modification of the plant. In this position, the SVP acts as a liaison between the plants and corporate and is accountable for ensuring that the company policy and procedures are properly implemented and continued at the nuclear site.

**A.2.2.1.a Plant Manager**

This position reports to the Site Vice President and is responsible for the safe operation of the nuclear plant. The plant manager has control of the onsite resources necessary for the safe operation and maintenance regardless of organizational reporting.

In this position, the plant manager assures the safe, reliable, and efficient operation of the plant within the constraints of applicable regulatory requirements, operating license, and the QAP. Functional areas of responsibility also include chemistry activities, environmental services, fuel handling (receipt, movement, and storage), health physics/radiological protection, operations and support, maintenance and production planning, and related procedures and programs. The Onsite Review Group serves the plant manager in a technical capacity and provides review of plant safety and performance (see Appendix A).

**A.2.2.1.b Licensing Manager**

This position reports to the SVP and is responsible for site regulatory interfaces and licensing actions.

**A.2.2.1.c Performance Improvement Manager**

This position reports to the SVP or plant manager and is responsible for administration of the corrective action and self-assessment programs.

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**A.2 Organization (Continued)**

The following positions report directly offsite, but functionally reports to a site position:

**A.2.2.2.a Engineering Manager**

This position reports directly to the Vice President Nuclear Engineering (offsite) and functionally interfaces with the SVP. The position has functional areas of responsibility that include authority for day-to-day engineering support activities, design engineering, engineering document control, engineering administration, modifications and their implementation, plant design configuration control, reactor engineering, system engineering, system testing, and technical support.

**A.2.2.2.b Training Manager**

This position reports to the Vice President Nuclear Operations Support (offsite) and functionally interfaces with the SVP and is responsible for training. The Training Manager provides direction, control, and overall supervision of training personnel and training for all site personnel as required. Functional areas of responsibility include training support services, technical training, and operations training.

**A.2.2.2.c Site Manager of Projects**

This position reports to the Vice President Nuclear Projects (offsite) with direct interface to the SVP and is responsible for installing plant modifications as a result of design changes and implementing other major projects.

**A.2.2.2.d Site Quality Manager**

This position reports to the Director Nuclear Assurance (offsite) and is responsible for site quality activities. Significant safety or quality issues requiring escalated action are directed through this position to senior management, as necessary. Functional responsibilities include conducting independent assessments of line and support activities; monitoring and assessing day-to-day station activities; stop work authority at the site; periodic reporting on the status and adequacy of the quality program; and providing quality verification and inspections.

**A.2.2.2.e Nuclear Materials Manager**

This position reports to the Vice President Integrated Supply Chain (offsite) with direct interface with the SVP. The position has functional areas of responsibility that include authority for day-to-day material support activities at the site. Activities include contract coordination, procurement document control, and receipt and control of material.

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**A.3 Responsibility**

FPL retains and exercises the responsibility for the scope and implementation of an effective overall QAP. Positions identified in Section A.2 may delegate all or part of the activities of planning, establishing, and implementing the program for which they are responsible to others, but retain the responsibility for the program's effectiveness. Decisions affecting safety are made at the level appropriate for its nature and effect, and with any necessary technical advice or review.

Senior management is regularly apprised of assessment results evaluating the adequacy of implementation of the QAP through the assessment functions described in Section C.

FPL ensures that the QAP is properly documented, approved and implemented before an activity within the scope of the program is undertaken. Management is responsible to assure that processes and procedures comply with the QATR and other applicable requirements, and that employees comply with them. Individual managers ensure that personnel working under their management cognizance are provided the necessary training and resources to accomplish their assigned tasks. Managers and supervisors are responsible for timely and continuing monitoring of performance to verify that day-to-day activities are conducted safely and in accordance with applicable requirements.

As described in Section C.3, Quality Assurance is responsible to verify that processes and procedures comply with QATR and other applicable requirements, that such processes or procedures are implemented, and that management appropriately ensures compliance.

Documents that implement the quality program are approved by responsible management; distributed; and revised in accordance with procedures. Work within the scope of the QAP is accomplished in accordance with these documents.

In addition, operating personnel responsibilities include:

- The reactor operator's authority and responsibility for shutting down the reactor when it is determined that the safety of the reactor is in jeopardy or when operating parameters exceed any of the reactor protection system set-points and automatic shutdown does not occur.
- The responsibility to determine the circumstances, analyze the cause, and determine that operations can proceed safely before the reactor is returned to power after a trip or an unexplained or unscheduled power reduction.
- The senior reactor operator's responsibility to be present at the plant and to provide direction for returning the reactor to power following a trip or an unscheduled or unexplained power reduction.
- The responsibility to believe and respond conservatively to instrument indications unless they are proved to be incorrect.

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**A.3 Responsibility (Continued)**

- The responsibility to adhere to the plant's Technical Specifications.
- The responsibility to review routine operating data to assure safe operation.
- The responsibility to take action to minimize personnel injury or damage to the facility and to protect the health and safety of the public in the event of an emergency not covered by approved procedures.

In establishing QAP responsibilities, FPL commits to compliance with NQA-1, 1994, Basic Requirement 1 and Supplement 1S-1.

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**A.4 Authority**

When FPL delegates responsibility for planning, establishing, or implementing any part of the overall QAP, sufficient authority to accomplish the assigned responsibilities is delegated. Regardless of delegation, FPL retains overall responsibility.

Responsibility and authority to stop unsatisfactory work, as delineated in Section A.2, includes authority to control further processing, delivery, installation, operation or use of nonconforming items. This assures that cost and schedule considerations do not override safety considerations.

In establishing QAP authorities, FPL commits to compliance with NQA-1, 1994, Basic Requirement 1 and Supplement 1S-1.

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**A.5 Personnel Training and Qualification**

Personnel assigned to implement elements of the QAP must be capable of performing their assigned tasks. To this end, FPL establishes and maintains formal indoctrination and training programs for personnel performing, verifying or managing activities within the scope of the QAP to assure that suitable proficiency is achieved and maintained. Generating site and support staff minimum qualification requirements are as delineated in plant Technical Specifications or other appropriate documents. Other qualification requirements may be established but will not reduce those required by plant Specifications. Sufficient managerial depth is provided to cover absences of incumbents. When required by code, regulation, or standard, specific qualification and selection of personnel is conducted in accordance with those requirements as established in the applicable FPL procedures. Indoctrination may include the administrative and technical objectives, requirements of the applicable codes and standards, and the QAP elements to be employed. Training for positions identified in 10CFR50.120 is accomplished according to programs accredited by the National Nuclear Accrediting Board of the National Academy for Nuclear Training that implements a systematic approach to training. Records of personnel training and qualification are maintained.

In establishing qualification and training programs, FPL commits to compliance with NQA-1, Basic Requirement 2, Supplements 2S-1, 2S-2, 2S-3 and 2S-4, and Non-mandatory Appendix 2A-1 with the following clarifications and exceptions:

- For Supplement 2S-1: Inspections, examinations or tests may be performed by individuals in the same organization as that which performed the work, provided that (a) the qualifications of the inspector for an activity are equal to or better than the minimum qualifications for persons performing the activity, (b) the work is within the skills of personnel and/or is addressed by procedures, and (c) if work involves breaching a pressure-retaining item, the quality of the work can be demonstrated through a functional test. When a, b and c are not met, inspections, examinations or tests are carried out by individuals certified in accordance with Supplement 2S-1. Individuals performing visual inspections required by the ASME Boiler and Pressure Vessel Code are qualified and certified according to Code requirements.
- In lieu of being certified as Level I, II or III in accordance with Non-mandatory Appendix 2A-1 of NQA-1-1994, personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities, that are in the same organization as that which performed the work, will be required to possess the same minimum level of qualification as that required for performing the task being verified. The verification shall be within the skills of these personnel and/or is addressed by procedures. Individuals responsible for the planning of such quality verification inspections and tests (i.e. establishing hold points and acceptance criteria in procedures, or determining who will be responsible for performing the inspections) will meet qualification requirements equivalent to those contained in Appendix 2A-1 and suitably trained for the function.

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**A.5 Personnel Training and Qualification (Continued)**

- In lieu of Supplement 2S-2, FPL will follow the applicable standard cited in the latest version(s) of Section XI of the ASME Boiler and Pressure Vessel Code approved by the NRC for use at FPL sites for qualification of nondestructive examination personnel.
- For Supplement 2S-3: The requirement that prospective Lead Auditors have participated in a minimum of five (5) audits in the previous three (3) years is replaced by the following, "The prospective lead auditor shall demonstrate his/her ability to properly implement the independent assessment (audit) process, as implemented by FPL according to Section C.3 of this QATR, to effectively lead an assessment team, and to effectively organize and report results, including participation in at least one nuclear independent assessment or audit within the year preceding the date of qualification." The term "audit" and "independent assessment" are synonymous and may be used interchangeably throughout the QAP.
- For Supplement 2S-3: FPL may apply a 90-day grace period to the requirement for a documented annual evaluation of lead auditor proficiency. When the grace period is applied, the next due date for the activity is based upon the original scheduled date. However, in all cases the periodicity shall not exceed one year plus 90 days.



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**A.6 Corrective Action**

FPL management, at all levels, fosters a non-punitive ("no-fault") attitude toward the identification of conditions adverse to quality. This includes failures, malfunctions, deficiencies, deviations, defective material and equipment, abnormal occurrences, nonconformances, and out-of-control processes, including the failure to follow procedures.

FPL implements a corrective action program to promptly identify, control, document, classify, and correct conditions adverse to quality. In addition, for significant conditions adverse to quality, the program provides for cause evaluation and corrective actions to prevent recurrence. Provisions are also made to ensure that corrective actions for significant conditions adverse to quality are completed as intended and are not inadvertently nullified by subsequent actions. Results of evaluations of conditions adverse to quality are analyzed to identify trends. Significant conditions adverse to quality and significant adverse trends are documented and reported to responsible management.

Prior to installation, nonconforming items are reviewed and accepted, rejected, repaired, or reworked, and are identified and controlled to prevent their inadvertent test, installation or use.

In establishing requirements for corrective action, FPL commits to compliance with NQA-1, 1994, Basic Requirements 15 and 16, and Supplement 15S-1.

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**A.7 Regulatory Commitments**

**A.7.1**

Through this QATR, FPL commits to compliance with the following:

- 10CFR50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants"
- 10CFR Part 71, Subpart H, "Quality Assurance for Packaging and Transportation of Radioactive Material"
- 10CFR Part 72, Subpart G, "Quality Assurance for Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste"
- 10CFR Part 21, "Reporting of Defects and Non-Compliance"
- General Design Criterion 1, of Appendix A to 10CFR Part 50
- 10CFR50.55a, "Codes and Standards"

**A.7.2**

When applicable, for Class 1, 2, and 3 items covered by Section III of the ASME Boiler and Pressure Vessel Code, the code Quality Assurance requirements are supplemented by the guidance of applicable regulatory guides (see Section A.7.3).

**A.7.3**

FPL also is committed to carrying out the provisions of certain nuclear quality assurance industry standards, other than ASME NQA-1. The extent of the FPL commitment to each of the Regulatory Positions of related NRC Regulatory Guides and Generic Letters is specifically described below. Commitment to a particular Regulatory Guide does not constitute commitment to Regulatory Guides or other standards that may be referenced therein, unless otherwise noted.

- Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants" – FPL commitments regarding qualification and training of personnel are described in Section A.5 of this QATR, which states that staff qualification requirements are as delineated in plant Technical Specifications or other documents, and that training for positions identified in 10CFR50.120 is accomplished according to programs accredited by the National Nuclear Accrediting Board of the National Academy for Nuclear Training.

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**A.7 Regulatory Commitments (Continued)**

- Safety/Regulatory Guide 1.26, Revision (site specific) “Quality Group Classifications and Standards for Water-, Steam-, and Radioactive Waste-Containing Components of Nuclear Power Plants” – Commitment to Safety/Regulatory Guide 1.26 is site specific, as required by the approved UFSAR/License at each FPL site. Sites may use this guidance to assist in establishing the lists of equipment to which this QAP applies, or for other purposes.
- Regulatory Guide 1.28, Revision 3, August 1985, “Quality Assurance Program Requirements (Design and Construction)” (ASME NQA-1, 1983a) – FPL does not commit to comply with position C.1 of this Regulatory Guide for personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities, that are in the same organization as that which performed the work; See the specific exceptions to 2S-1 and 2A-1 contained in Section A.5 of this QATR. FPL complies with position C.2 for record retention times, and position C.3.2 for external audits, with the exception that for position C.3.2.2, FPL will review the information described therein as it becomes available through its ongoing receipt inspection, operating experience, and supplier evaluation programs, in lieu of performing a specific evaluation on an annual basis. The results of the reviews are promptly considered for effect on a supplier’s continued qualification and adjustments made as necessary (including corrective actions, adjustments of supplier audit plans, and input to third party auditing entities, as warranted). Additionally, results are reviewed periodically to determine if, as a whole, they constitute a significant condition adverse to quality requiring additional action. In lieu of compliance with Regulatory Position C.3.1, FPL establishes independent assessment frequencies as described in Section C of this QATR. In lieu of NQA-1 1983a, FPL uses NQA-1 1994.
- Safety/Regulatory Guide 1.29, Revision (site specific) “Seismic Design Classification” – Some FPL plants were designed, constructed and licensed based on criteria available prior to this Regulatory Guide being issued. The specific design criteria and seismic designations are reflected in each plant’s UFSAR, and in other docketed analysis. Thus, the commitment to Safety/Regulatory Guide 1.29 is site specific, as required by the approved UFSAR/License at each FPL site. Sites may use this guidance to assist in establishing the lists of equipment to which this QAP applies, or for other purposes.

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**A.7 Regulatory Commitments (Continued)**

- Regulatory Guide 1.30, August 1972, "Quality Assurance Requirements for the Installation, Inspection and Testing of Instrumentation and Electric Equipment," (ANSI N45.2.4-1972/IEEE 336-1971) – FPL substitutes NQA-1 1994, Subpart 2.4/IEEE 336-1985 for N45.2.4 in its commitment to Regulatory Guide 1.30. As noted in Regulatory Position C.1, Subpart 2.4 is being used in conjunction with NQA-1, Part 1, which replaced ANSI N45.2. As noted in Regulatory Position C.2, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.4 includes commitment to those standards to the extent necessary to implement Subpart 2.4 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.3 indicates that the requirements of the endorsed standard should also be considered applicable during the operation phase of the nuclear power plant. This is addressed in Sections B.12 and B.16 of this QATR, which also establish any necessary exceptions or alternatives to the provisions of Subpart 2.4.
- Regulatory Guide 1.33, Revision 2, February 1978, "Quality Assurance Program Requirements (Operation)" (N18.7) – NQA-1 contains quality assurance requirements equivalent to those of ANSI N-18.7, and FPL has included in this QATR the remaining "administrative controls" elements from N-18.7 (1976). Therefore, FPL does not commit to compliance with the requirements of ANSI N-18.7. As recommended by Regulatory Position C.1, FPL uses Appendix A of RG 1.33 as guidance in establishing the types of procedures required for plant operation and support. Regulatory Position C.2 is no longer considered valid, as the referenced standards and guidance have now been incorporated into ASME NQA-1 1994, or are addressed specifically in this section. Regulatory Position C.3 does not apply since FPL does not use independent/offsite review. However, Appendix A to the QATR specifies the expanded scope of review for the On-Site Review Group which includes proposed changes to Operating License and Technical Specifications. In lieu of compliance with Regulatory Position C.4, FPL establishes assessment topics and frequencies as described in Section C.3 of this QATR. In lieu of compliance with Regulatory Position C.5, FPL has established appropriate equivalent requirements within this QATR.
- Regulatory Guide 1.36, Revision 0, February 1973, "Nonmetallic Thermal Insulation for Austenitic Stainless Steel" – Some of the current FPL plants were committed to this Regulatory Guidance during original construction. Regulatory Guide 1.36 may be used for plant modifications on a case by case basis, but this QATR makes no generic commitment thereto.

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**A.7 Regulatory Commitments (Continued)**

- Regulatory Guide 1.37, March 1973, "Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants," (ANSI N45.2.1-1973) – FPL substitutes NQA-1 1994, Subpart 2.1 for N45.2.1 in its commitment to Regulatory Guide 1.37. As noted in Regulatory Position C.1, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.1 includes commitment to those standards to the extent necessary to implement Subpart 2.1 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Positions C.3, C.4 and C.5 recommend alterations to certain provisions of N45.2.1. The provisions of NQA-1, Subpart 2.1 establish requirements that are consistent with those recommendations. Regulatory Position C.2 indicates that the requirements of the endorsed standard should be used during the operations phase "when applicable." This is addressed in Sections B.7 and B.16 of this QATR, which also establish any necessary exceptions or alternatives to the provisions of Subpart 2.1.
  
- Regulatory Guide 1.38, Revision 2, May 1977, "Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage, and Handling of Items for Water-Cooled Nuclear Power Plants," (ANSI N45.2.2-1972) – FPL substitutes NQA-1 1994, Subpart 2.2 for N45.2.2 in its commitment to Regulatory Guide 1.38. As noted in Regulatory Position C.1.a, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.2 includes commitment to those standards to the extent necessary to implement Subpart 2.2 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.1.b modifies a provision of N45.2.2 such that the minimum load for dynamic testing to re-rate hoisting equipment for special lifts becomes 110% of the rated load. FPL takes exception to the Storage Areas section (6.2.4) of NQA-1 and commits to "the use or storage of food, drinks, and salt tablet dispensers in any storage area shall be controlled and be limited to designated areas where such use or storage is not deleterious to stored items". The Handling section (7) of NQA-1, Subpart 2.2 defers to the provisions of Subpart 2.15. FPL does not commit to Subpart 2.15, as there is no current NRC guidance regarding the other provisions of this part. For purposes of compliance to Regulatory Guide 1.38, Position C.1.b, FPL commits to follow the guidance as stated (see Section B.7). Regulatory Positions C.1.c, C.1.e, C.2.a, C.2.b, C.2.c, C.2.d and C.2.e recommend alterations to certain provisions of N45.2.2. The provisions of NQA-1, Subpart 2.2 establish requirements that are consistent with those recommendations. Regulatory Position C.1.d indicates that the requirements of the endorsed standard should be used during the operations phase "when applicable." This is addressed in Section B.7 of this QATR, which also establishes any necessary exceptions or alternatives to the provisions of Subpart 2.2.

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**A.7 Regulatory Commitments (Continued)**

- Regulatory Guide 1.39, Revision 2, September 1977, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants," (ANSI N45.2.3-1973) – FPL substitutes NQA-1 1994, Subpart 2.3 for N45.2.3 in its commitment to Regulatory Guide 1.39. As noted in Regulatory Position C.1, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.3 includes commitment to those standards to the extent necessary to implement Subpart 2.3 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.2 indicates that the provisions of section 3.2.3 of N45.2.3 are not part of the Regulatory endorsement. As NQA-1, Subpart 2.3, section 3.2.3 has the same wording as N45.2.3, the Regulatory Position is applicable and will be followed in FPL's implementation of Subpart 2.3. Regulatory Position C.3 indicates that the endorsed standard is "applicable for housekeeping activities during the operations phase that are comparable to those occurring during construction." This is addressed in Section B.7 of this QATR that also establishes any necessary exceptions or alternatives to the provisions of Subpart 2.3.
- Regulatory Guide 1.54, Revision 0, June 1973, "Quality Assurance for Protective Coatings Applied to Nuclear Power Plants" (N101.4-1972) - Commitment to Regulatory Guide 1.54 is site specific, as required by the approved UFSAR/License at each FPL site.
- Regulatory Guide 1.94, Revision 1, April 1976, "Quality Assurance Requirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants," (ANSI N45.2.5-1974) – FPL substitutes NQA-1 1994, Subpart 2.5 for N45.2.5 in its commitment to Regulatory Guide 1.94; however, Subpart 2.5 includes requirements for soils and foundations which were not included in N45.2.5, and the commitment to Subpart 2.5 herein does not include commitment to those requirements. As noted in Regulatory Position C.1, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.5 includes commitment to those standards to the extent necessary to implement Subpart 2.5 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.2 recommends using the general planning provisions of N45.2.5 in conjunction with Regulatory Guide 1.55, which has since been withdrawn; therefore, this position is no longer applicable. Regulatory Positions C.3 and C.4 recommend alterations to certain provisions of N45.2.5. The provisions of NQA-1, Subpart 2.5 are consistent with those recommendations. Applicability and use of Subpart 2.5 is addressed in Sections B.12 and B.16 of this QATR, which also establish any necessary exceptions or alternatives to the provisions of Subpart 2.5.
- Regulatory Guide 1.97, Revision 3, May 1983, "Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident" (Table 1, paragraph 5) – In lieu of the Regulatory Guides listed in the Table, FPL commits to the Regulatory Guidance and industry standards for quality assurance as described in this QATR. Commitment to the technical provisions of Regulatory Guide 1.97 is site specific as addressed in each plant UFSAR or other licensing commitments.

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**A.7 Regulatory Commitments (Continued)**

- Regulatory Guide 1.116, Revision 0-R, May 1977, "Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems," (ANSI N45.2.8-1975) – FPL substitutes NQA-1 1994, Subpart 2.8 for N45.2.8 in its commitment to Regulatory Guide 1.116. As noted in Regulatory Position C.1, other industry standards may be referenced; the commitment in this QATR to NQA-1, Subpart 2.8 includes commitment to those standards to the extent necessary to implement Subpart 2.8 requirements. If NRC guidance applies to those referenced standards, it is followed. Regulatory Position C.3 recommends using section 5 of N45.2.8 in conjunction with Regulatory Guide 1.68 for pre-operational, cold functional, and hot functional testing. While section 5 of NQA-1, Subpart 2.8 provides the same requirements, it is anticipated that FPL plants, since they are already beyond these tests, will not need to implement Regulatory Guide 1.68. If testing in accordance with Regulatory Guide 1.68 becomes necessary, FPL will comply with the guidance of the Regulatory Guide 1.116 position. Regulatory Position C.2 indicates that the endorsed standard should be "followed for those applicable operations phase activities that are comparable to activities occurring during the construction phase." This is addressed in Sections B.12 and B.16 of this QATR, which also establish any necessary exceptions or alternatives to the provisions of Subpart 2.8.
- Regulatory Guide 1.143, Revision 2, November 2001, "Design Guidance for Radioactive Waste Management Systems, Structures and Components Installed in Light-Water-Cooled Nuclear Power Plants" (Position C.7) – FPL meets the intent of the quality assurance guidance cited in Position C.7. Compliance with the remainder of the [technical] positions of Regulatory Guide 1.143 is site specific, as addressed in each plant UFSAR.
- Regulatory Guide 1.152, Revision 1, January 1996, "Criteria for Digital Computers in Safety Systems of Nuclear Power Plants" – None of the current FPL plants were committed to this Regulatory Guidance during original construction. Regulatory Guide 1.152 may be used for plant modifications on a case by case basis, but this QATR makes no generic commitment thereto.
- Regulatory Guide 1.155, Revision 0, August 1988, "Station Blackout" (Position C.3.5) - FPL meets assurance guidance cited in Position C.3.5, Appendix A. Compliance with Appendix B and the remainder of the [technical] positions of Regulatory Guide 1.155 is site specific, as addressed in each plant UFSAR or License commitments.
- Generic Letter 89-02/EPRI-NP-5652 (March 1988, and supplements through March 1993) – FPL commits to compliance with the endorsed industry guidance regarding selection and qualification of commercial grade suppliers and dedication of commercial grade items for use in safety related applications.
- Generic Letter 91-05 (April 1991) – FPL commits to compliance with the guidance regarding licensee commercial-grade procurement and dedication programs.

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**A.7 Regulatory Commitments (Continued)**

- Branch Technical Position CMEB 9.5-1, Revision 2, July 1981 (Positions C.2 and C.4) – FPL provisions for administrative controls for Fire Protection comply with site specific commitments, or with the provisions of Position C.2 of CMEB 9.5-1, Rev. 2, as specified in NRC approved site fire protection programs and the applicable NRC Safety Evaluation Reports. Application of the provisions of this QATR to fire protection activities provides elements of quality assurance that comply with site specific fire protection quality assurance commitments or with CMEB 9.5.1, Revision 2, Position C.4.
- Regulatory Guide 4.15, Revision 1, February 1979, “Quality Assurance for Radiological Monitoring Programs (Normal Operations) – Effluent Streams and the Environment” – FPL meets the intent of Regulatory Guide 4.15.
- Regulatory Guide 7.10, Revision 2, March 2005, “Establishing Quality Assurance Programs for Packaging Used in the Transport of Radioactive Material” – FPL commits to implement the quality assurance guidance for activities related to the packaging and transport of radioactive material that are under its control. Quality Assurance for the design, fabrication and licensing of shipping containers is the responsibility of the container certificate holders.
- Generic Letter 85-06, April 1985, “Quality Assurance Guidance for ATWS Equipment That Is Not Safety-Related” – FPL commits to the quality assurance guidance cited in the Generic Letter.
- Regulatory Issue Summary 2000-18, October 2000, “Guidance on Managing Quality Assurance Records in Electronic Media” – In instances when FPL chooses electronic media storage as a means of maintaining required records, FPL will comply with the guidance of this Regulatory Issue Summary.



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**B. PERFORMANCE/VERIFICATION**

**B.1 Methodology**

Personnel who work directly or indirectly for FPL are responsible for the achievement of acceptable quality in the work covered by this QATR. This includes design, engineering, procurement, manufacturing, construction, installation, start-up, maintenance, modifications, and operations. FPL personnel performing verification activities are responsible for verifying the achievement of acceptable quality. Activities governed by the QAP are performed as directed by documented instructions, procedures and drawings that are of a detail appropriate for the activity's complexity and effect on safety. Instructions, procedures and drawings specify quantitative or qualitative acceptance criteria as applicable or appropriate for the activity, and verification is against these criteria. Provisions are established to designate or identify the proper documents to be used in an activity, and to ascertain that such documents are being used.

**B.2 Design Control**

FPL has established and implements a program to control the design of items that are subject to the provisions of this QATR (see Section A.1). The program includes provisions to control design inputs, processes, outputs, changes, interfaces, records and organizational interfaces. These provisions assure that design inputs (such as design bases and the performance, regulatory, quality, and quality verification requirements) are correctly translated into design outputs (such as specifications, drawings, procedures, and instructions) such that the final design output can be related to the design input in sufficient detail to permit verification. The program defines the interface controls (internal and external between participating design organizations and across technical disciplines) necessary to control the development, review, approval, release, distribution and revision of design inputs and outputs.

FPL design processes provide for design verification (as described in Section B.3) that items and activities subject to the provisions of this QATR are suitable for their intended application, consistent with their effect on safety. Changes to final designs (including field changes) are subjected to these controls, which include measures commensurate with those applied to original plant design. Design changes and disposition of nonconforming items as "use as is" or "repair" are reviewed and approved by the responsible FPL design organization.

FPL maintains records sufficient to provide evidence that the design was properly accomplished. These records include the final design output and any revisions thereto, as well as record of the important design steps (e.g., calculations, analyses and computer programs) and the sources of input that support the final output.

In addition, temporary design changes (temporary modifications), such as temporary bypass lines, electrical jumpers and lifted leads, and temporary trip-point settings, are controlled by procedures that include requirements for appropriate installation and removal verifications and status tracking.

In establishing its program for design control, FPL commits to compliance with NQA-1, 1994, Basic Requirement 3, and Supplement 3S-1, Sections 1, 2, 3, 5, 6, and 7.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

**B.3 Design Verification**

The FPL design control program includes requirements for verifying the acceptability of design activities and documents, consistent with their effect on safety. This includes design inputs, design outputs and design changes. Design verification procedures are established and implemented to assure that an appropriate verification method is used, the appropriate design parameters to be verified are chosen, the acceptance criteria are identified, and the verification is satisfactorily accomplished and documented. Verification methods may include, but are not limited to, design reviews, alternative calculations and qualification testing. Testing used to verify the acceptability of a specific design feature demonstrates acceptable performance under conditions that simulate the most adverse design conditions expected for an item's intended use.

FPL completes design verification activities before the design outputs are used by other organizations for design work, and before they are used to support other activities such as procurement, manufacture or construction. When such timing cannot be achieved, the unverified portion of the design is identified and controlled such that, in all cases, the design verification is completed before relying on the item to perform its intended safety function.

The FPL design verification can be performed by the designer's immediate supervisor, provided (1) the supervisor did not specify a singular design approach or rule out certain design considerations and did not establish the design inputs used in the design, or (2) the supervisor is the only technically qualified individual capable of performing the verification, and (3) the need is individually documented and approved in advance by the supervisor's management. The frequency and effectiveness of the use of supervisors as design verifiers are independently verified to guard against abuse.

In establishing its program for design verification, FPL commits to compliance with NQA-1, 1994, Basic Requirement 3, and Supplement 3S-1, Section 4.

**B.4 Procurement Control**

FPL establishes and implements controls to assure that purchased items (components, spares and replacement parts necessary for plant operation, refueling, maintenance and modifications) and services are subject to quality and technical requirements at least equivalent to those specified for original equipment or specified by properly reviewed and approved revisions to assure the items are suitable for the intended service, and are of acceptable quality, consistent with their effect on safety. These controls include provisions such that:

- Where original technical or quality assurance requirements cannot be determined, an engineering evaluation is conducted and documented by qualified staff to establish appropriate requirements and controls to assure that interfaces, interchangeability, safety, form, fit and function, as applicable, are not adversely affected or contrary to applicable regulatory requirements.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

- Items are inspected (see Section B.12) and identified and stored (see Sections B.6 and B.7) to protect against damage, deterioration or misuse.
- Prospective suppliers of safety related items and services are evaluated to assure that only qualified suppliers are used. Qualified suppliers are periodically evaluated to assure they continue to provide acceptable products and services. Industry programs, such as those applied by ASME, NUPIC, or other established utility groups, are used as input or the basis for supplier qualification whenever appropriate. In addition, FPL commits to Position C.3.2 of Regulatory Guide 1.28, Revision 3, for auditing and evaluation of suppliers, with the exception that for position C.3.2.2, FPL will review the information described therein as it becomes available through its ongoing receipt inspection, operating experience, and supplier evaluation programs, in lieu of performing a specific evaluation on an annual basis. The results of the reviews are promptly considered for effect on a supplier's continued qualification and adjustments made as necessary (including corrective actions, adjustments of supplier audit plans, and input to third party auditing entities, as warranted). In addition, results are reviewed periodically to determine if, as a whole, they constitute a significant condition adverse to quality requiring additional action. FPL considers that other 10CFR50 licensees, Authorized Nuclear Inspection Agencies, National Institute of Standards and Technology, or other state and federal agencies which provide items or services to FPL plants are not required to be evaluated or audited. FPL may apply a 90-day grace period to the requirement to audit suppliers on a triennial basis. When the grace period is applied, the next due date for the activity is based upon the original scheduled date. However, in all cases the periodicity shall not exceed three years plus 90 days.
- Applicable technical, regulatory, administrative, quality and reporting requirements (such as specifications, codes, standards, tests, inspections, special processes, and 10CFR21) are invoked for procurement of items and services. Documentary evidence that an item conforms to these requirements is available at the site before relying on the item to perform its intended safety function. These documents are considered records according to Section B.15.
- Provisions are made for accepting purchased items and services, such as source verification, receipt inspection, pre- and post-installation tests, certificates of conformance, and document reviews. Acceptance actions are completed to ensure that procurement, inspection, and test requirements, as applicable, have been satisfied before relying on the item to perform its intended safety function.
- Controls are imposed for the selection, determination of suitability for intended use (critical characteristics), evaluation, receipt and acceptance of commercial grade or "off-the-shelf" items to assure they will perform satisfactorily in service in safety related applications.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

- When purchasing commercial grade calibration services from a supplier that has been accredited by a nationally recognized accrediting body. (NAVLAP or other accrediting body recognized by NAVLAP via a Mutual Recognition Agreement (MRA)), FPL may accept the accreditation in lieu of performing an audit, accepting an audit by another licensee or conducting a commercial grade survey. In order to accept the accreditation FPL will perform a documented review of the supplier's accreditation. The review shall, as a minimum, verify all of the following:
  - (a) The accreditation is to ANSI/ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories."
  - (b) The accrediting body is NVLAP (National Voluntary Laboratory Accreditation Program) or A2LA (American Association for Laboratory Accreditation).
  - (c) The published Scope of Accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.

In establishing controls for procurement, FPL commits to compliance with NQA-1, 1994, Basic Requirements 4 and 7, and Supplements 4S-1 and 7S-1, with the following exceptions:

- For Supplement 4S-1, Section 2.3, which requires procurement documents to require a quality program that complies with NQA-1, FPL may apply other nationally recognized and NRC endorsed quality standards, such as N45.2, as appropriate to the circumstances of the procurement.
- For Supplement 7S-1, Section 8.1, documentary evidence that items conform to procurement requirements need not be available at the site prior to item installation, but will be available at the site prior to placing reliance on the item for its intended safety function.
- For Supplement 4S-1 and Supplement 7S-1, FPL will use the guidance contained in Generic Letter 89-02/EPRI NP-5652 and Generic Letter 91-05 to procure Commercial Grade Items in lieu of these requirements.
- For commercial grade calibration services from a supplier that has been accredited by a nationally recognized accrediting body (NAVLAP or other accrediting body recognized by NAVLAP via a Mutual Recognition Agreement (MRA)), FPL may accept the service subject to the restrictions noted in Section B.4 above instead of Supplement 4S-1 and Supplement 7S-1.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

**B.5 Procurement Verification**

FPL establishes and implements measures to verify the quality of purchased items and services, whether purchased directly or through contractors, at intervals and to a depth consistent with the item's or service's importance to safety, complexity, quantity and the frequency of procurement. Verification actions include testing, as appropriate, during design, fabrication and construction activities associated with plant maintenance or modifications. Verifications occur at the appropriate phases of the procurement process, including, as necessary, verification of activities of suppliers below the first tier.

In establishing procurement verification controls, FPL commits to compliance with NQA-1, 1994, Basic Requirement 7 and Supplement 7S-1.

**B.6 Identification and Control of Items**

FPL establishes and implements provisions for the identification and control of items to prevent the use of incorrect or defective items. This includes controls for consumable materials and items with limited shelf life. The identification of items is maintained throughout fabrication, erection, installation and use so that the item can be traced to its documentation, consistent with the item's effect on safety. Identification locations and methods are selected so as not to affect the function or quality of the item.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

In establishing provisions for identification and control of items, FPL commits to compliance with NQA-1, 1994, Basic Requirement 8 and Supplement 8S-1.

**B.7 Handling, Storage and Shipping**

FPL establishes and implements provisions to control the handling, storage, shipping, cleaning and preservation of items to prevent inadvertent damage, loss or deterioration. These provisions include specific procedures, when required to maintain acceptable quality, for cleaning, handling, storage, packaging, shipping and preserving items important to safety. Items are appropriately marked and labeled during packaging, shipping, handling and storage to identify, maintain and preserve the item's integrity and indicate the need for special controls. Special controls (such as containers, shock absorbers, accelerometers, inert gas atmospheres, specific moisture content levels and temperature levels) are provided when required to maintain acceptable quality.

In establishing provisions for handling, storage and shipping, FPL commits to compliance with NQA-1, 1994, Basic Requirement 13 and Supplement 13S-1. FPL also commits to compliance with the requirements of NQA-1, 1994, Subpart 2.2, with the following exceptions:

- Subpart 2.2, Section 2.2 establishes criteria for classifying items into protection levels. Instead of classifying items into protection levels, FPL plants may establish controls for the packaging, shipping, handling and storage of such items on a case-by-case basis with due regard for the item's complexity, use, and sensitivity to damage. Prior to installation or use, the items are inspected and serviced as necessary to assure that no damage or deterioration exists which could affect their function.
- Subpart 2.2, Section 5.2.2 requires receiving inspections be performed in an area equivalent in environmental controls to those for the level of storage of the item. At FPL plants, receiving inspection area environmental controls may be less stringent than the storage environmental requirements for the item. Such inspections are performed in a manner and in an environment which does not endanger the required quality of the item.
- Subpart 2.2, Section 6.2.4 states that the use or storage of food, drinks, and salt tablet dispensers in controlled storage areas shall not be permitted. FPL takes exception to the wording of Section 6.2.4 and substitutes an alternate requirement that the use or storage of food, drinks, and salt tablet dispensers in any storage area shall be controlled and be limited to designated areas where such use or storage is not deleterious to the stored items.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

- Subpart 2.2, Section 7.1 refers to Subpart 2.15 for requirements related to handling of items. The scope of Subpart 2.15 includes hoisting, rigging and transporting of items for nuclear power plants. This scope exceeds the scope of the NRC's original endorsement of ANSI N45.2.2 in Regulatory Guide 1.38, and establishes requirements for which there is no NRC regulatory position. In lieu of compliance with Subpart 2.15, FPL establishes and implements controls over hoisting, rigging and transport activities to the extent necessary to protect the integrity of the items involved, as well as potentially affected nearby structures and components. For re-rating of lifting equipment to allow "special lifts," FPL performs dynamic load testing over the full range of the lift using test loads at least 110% of the lift weight. Dynamic tests include raising, lowering, and traversing the load. Where required, FPL complies with applicable hoisting, rigging and transportation regulations and codes.

Housekeeping practices during normal operations and maintenance activities, including refueling, are established to account for conditions or environments that could affect the quality of structures, systems and components within the plant. This includes control of cleanliness of facilities and materials, fire prevention and protection, disposal of combustible material and debris, control of access to work areas, protection of equipment, radioactive contamination control and storage of solid radioactive waste. Housekeeping practices assure that only proper materials, equipment, processes and procedures are used and that the quality of items is not degraded as a result. Necessary procedures or work instructions, such as for electrical bus and control center cleaning, cleaning of control consoles, and radioactive decontamination are developed and used.

In addition, FPL commits to compliance with the requirements of NQA-1, 1994, Subpart 2.1, to establish appropriate provisions for the cleaning of fluid systems and associated components; and Subpart 2.3, to establish appropriate provisions for housekeeping; with the following exceptions:

- Subpart 2.1, Sections 3.1 and 3.2 establish criteria for classifying items into cleanliness classes and requirements for each class. Instead of using the cleanliness level system of Subpart 2.1, FPL plants may establish cleanliness requirements on a case-by-case basis, consistent with the other provisions of Subpart 2.1. FPL establishes appropriate cleanliness controls for work on safety related equipment to minimize introduction of foreign material and maintain systems/component cleanliness throughout maintenance or modification activities, including documented verification of absence of foreign materials prior to system closure.
- Instead of the five-level zone designation in Subpart 2.3, FPL bases its control over housekeeping activities on a consideration of what is necessary and appropriate for the activity involved. The controls are effected through procedures or instructions that, in the case of maintenance or modification work, are developed on a case-by-case basis. Factors considered in developing the procedures and instructions include cleanliness control, personnel safety, fire prevention and protection, radiation control and security. The procedures and instructions make use of standard janitorial and work practices to the extent possible.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

**B.8 Test Control**

FPL establishes and implements testing programs to demonstrate that items subject to the provisions of this QATR will perform satisfactorily in service, that the plant can be operated safely and as designed, and that the coordinated operation of the plant as a whole is satisfactory. These programs include criteria for determining when testing is required, such as proof tests before installation, pre-operational tests, post-maintenance tests, post-modification tests, inservice tests, and operational tests (such as surveillance tests required by Plant Technical Specifications), to demonstrate that performance of plant systems is in accordance with design intent. Programs also include provisions for establishing and adjusting test schedules and maintaining status for periodic or recurring tests. Tests are performed according to applicable procedures that include, consistent with the effect on safety, (1) instructions and prerequisites to perform the test, (2) use of proper test equipment, (3) acceptance criteria, and (4) mandatory verification points as necessary to confirm satisfactory test completion. Test results are documented and evaluated by the organization performing the test and reviewed by the appropriate authority having responsibility for the item being tested. If acceptance criteria are not met, retesting is performed as needed to confirm acceptability following correction of the system or equipment deficiencies that caused the failure.

In establishing provisions for testing, FPL commits to compliance with NQA-1, 1994, Basic Requirement 11 and Supplement 11S-1.

**B.9 Measuring and Test Equipment Control**

FPL establishes and implements provisions to control the calibration, maintenance, and use of measuring and test equipment, including installed plant instrumentation, that provide information important to safe plant operation. The provisions cover equipment such as indicating and actuating instruments and gages, tools, reference and transfer standards, and nondestructive examination equipment. The provisions assure that:

- Measuring and test equipment is calibrated at specified intervals on the basis of the item's required accuracy, intended use, frequency of use, and stability characteristics or other conditions affecting its performance. Alternatively, equipment may be calibrated immediately before and after use if a defined interval is not appropriate.
- Measuring and test equipment is labeled, tagged or otherwise controlled to indicate its calibration status and provide traceability to calibration test data or records.
- Calibrations are performed against standards that have an accuracy of at least four times the required accuracy of the equipment being calibrated. When this is not possible, the standards have an accuracy that ensures the equipment being calibrated will be within the required tolerance.



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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

- Where possible, calibration standards are traceable to appropriate national standards. Calibration standards have greater accuracy than the standards being calibrated, except where the same accuracy as the instruments being calibrated can be shown to be adequate for the service requirements.
- *Measuring and test equipment found out of calibration is tagged or segregated and not used until it is successfully re-calibrated.* An evaluation is performed to determine the acceptability of any items measured, inspected or tested with an out-of-calibration device from the time of the previous calibration.

In establishing provisions for control of measuring and test equipment, FPL commits to compliance with NQA-1, 1994, Basic Requirement 12, Supplement 12S-1 and Subpart 2.16 for establishing appropriate requirements for calibration and control of measuring and test equipment, including installed plant instrumentation, with the following exception:

- Section 5.5 of IEEE 498-85 (NQA-1, Subpart 2.16) requires all M&TE to be labeled. As stated above, FPL plants may not label certain M&TE, such as installed instrumentation, but provide other means of identification so appropriate controls can be implemented. This exception also applies to Section 7.2.1 of IEEE 336-85 (NQA-1, Subpart 2.4).

**B.10 Inspection, Test and Operating Status**

FPL establishes and implements measures to identify the inspection, test and operating status of items and components subject to the provisions of this QATR in order to maintain personnel and reactor safety and avoid unauthorized operation of equipment. Where necessary to preclude inadvertent bypassing of inspections or tests, or to preclude inadvertent operation, these measures require the inspection, test or operating status be verified before release, fabrication, receipt, installation, test or use. These measures also establish the necessary authorities and controls for the application and removal of status indicators or labels. Equipment control provisions for workmen's protection comply with applicable federal and state OSHA regulations.

In establishing measures for control of inspection, test and operating status, FPL commits to compliance with NQA-1, 1994, Basic Requirement 14.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

**B.11 Special Process Control**

FPL establishes and implements provisions to assure that special processes that require interim process controls to assure quality, such as welding, heat treating, chemical cleaning, and nondestructive examination, are controlled. These provisions include assuring that special processes are accomplished by qualified personnel using qualified procedures and equipment. Special processes are performed in accordance with applicable codes, standards, specifications, criteria or other specially established requirements. Special processes are those where the results are highly dependent on the control of the process or the skill of the operator, or both, and for which the specified quality cannot be fully and readily determined by inspection or test of the final product.

In establishing measures for the control of special processes, FPL commits to compliance with NQA-1, 1994, Basic Requirement 9 and Supplement 9S-1, as well as the applicable ASME Boiler and Pressure Vessel Code provisions established via 10CFR50.55a.

**B.12 Inspection**

FPL establishes and implements provisions for inspections to assure that items, services and activities affecting safety meet established requirements and conform to applicable documented instructions, procedures and drawings. Inspection may also be applied to items, services and activities affecting plant reliability. Types of inspections may include those verifications related to procurement, as discussed in Sections B.4 and B.5, such as source, in-process, final, and receipt inspection, as well as maintenance, modification, in-service, and operational activities. Inspections are carried out by properly qualified persons independent of those who performed or directly supervised the work.

Inspection planning (for those activities subject to inspection) identifies the characteristics and activities to be inspected, the inspection techniques, the acceptance criteria and the organization responsible for performing the inspection. Inspection planning identifies required hold points, beyond which work is not to proceed without the consent of the inspection organization. Provisions for ASME Boiler and Pressure Vessel Code Authorized Inspections are included when required.

Inspection results are documented by the inspector and approved by authorized personnel. If acceptance criteria are not met, corrected areas are reinspected.

In establishing inspection requirements, FPL commits to compliance with NQA-1, 1994, Basic Requirement 10, Supplement 10S-1 and Subpart 2.4. In addition, for situations comparable to original construction, FPL commits to compliance with the requirements of Subparts 2.5 and 2.8 for establishing appropriate inspection requirements.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

**B.13 Corrective Action**

FPL establishes and implements provisions to assure that personnel have both the responsibility and authority to identify conditions adverse to quality, and the opportunity to suggest, recommend or provide solutions to resolve the condition. Provisions also include verification of resolution of significant issues (see also Section A.6).

Reworked, repaired and replacement items are inspected and tested to meet the original inspection or test requirements, or appropriately specified alternatives (see also Sections B.8 and B.12).

If evidence indicates that common components in safety related systems have performed unsatisfactorily, *compensatory or corrective measures are planned prior to replacement or repair of such components.* Replacement components receive adequate testing or are of a design for which experience indicates a high probability of satisfactory performance. Consideration is given to phased replacement to permit inservice performance to be evaluated and minimize the possibility of systemic failure.

In establishing provisions for corrective action and control of nonconforming items, FPL commits to compliance with NQA-1, 1994, Basic Requirements 15 and 16, and Supplement 15S-1.

**B.14 Document Control**

FPL establishes and implements provisions to specify the format and content (see Appendix B for procedures), and control the development, review, approval, issue, use and revision, of documents that specify quality requirements or prescribe activities affecting quality or safe operation to assure the correct documents are being employed. These provisions assure that *specified documents are reviewed for adequacy, approved prior to use by authorized persons,* and distributed according to current distribution lists and used at the location where the prescribed activity takes place. Procedures governing generating site activities (see Appendix B) are reviewed by qualified persons, other than the preparer, as designated by the Plant Manager. Such procedure reviews include determination whether additional cross-discipline reviews are required. Only safety related procedures, and procedures important to safety as used in 10CFR71 and 72, from the types listed in Appendix B (Pages 50 – 53), require this review. Provisions include establishing levels of use, such as requiring the document to be present at the work location. Documents subject to control provisions include, but are not limited to, drawings (design, as-built), engineering documents (calculations, analyses, specifications, computer codes, Updated Final Safety Analysis Reports, Plant Technical Specifications), and procedures (administrative, operating, emergency operating, maintenance, calibration, surveillance, inspection, test). Other documents, such as those related to procurement, corrective actions, and assessments, are controlled as defined by the provisions and commitments cited in those sections of this QATR. Controlled copies of instructions and procedures are made available to and used by the persons performing the activity covered. New or revised controlled documents are made available in a timely fashion to support ongoing work and preclude use of incorrect information. Superseded documents are identified or removed from availability. Each site maintains documentation that describes how implementing documents are maintained to assure that QAP requirements are met and are not inadvertently removed in later revisions.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

Revisions to controlled documents are reviewed for adequacy and approved for release by the same organization(s) as originally did so, or by other designated organizations that are qualified and sufficiently knowledgeable of the requirements and intent of the original document. FPL also establishes programmatic procedure preparation, review and usage controls that ensure procedures are technically and administratively correct. These controls ensure that procedures are reviewed when pertinent source material is revised (such as when Technical Specifications are revised), when unusual incidents occur, when plant modifications are made, and when significant deficiencies are identified. Procedures may also be reviewed because industry experience reviews, use during job execution or training, self-assessments or independent assessments identify deficiencies or opportunities for improvement. Revisions are made as necessary. Emergency operating procedures, off-normal procedures, and procedures which implement the emergency plan are exercised on the simulator or reviewed at least once every two years and revised as appropriate.

Temporary changes to approved procedures that do not change the intent are approved by two members of plant staff knowledgeable in the areas affected by the procedure. Additionally for temporary changes to approved procedures identified in Appendix B of this QATR, at least one of the two approvers must hold a senior reactor operator's license. Temporary changes are documented, reviewed by the ORG or by a qualified reviewer, and approved by the designated approval authority within 14 days of implementation. If appropriate, temporary changes are incorporated in the next revision of the procedure.

In establishing provisions for document control, FPL commits to compliance with NQA-1, 1994, Basic Requirement 6 and Supplement 6S-1.

**B.15 Records**

FPL establishes and implements provisions to ensure that sufficient records of items and activities affecting quality are generated and maintained to reflect completed work. Such records may include, but are not limited to, design, engineering, procurement, manufacturing, construction, inspection, test, installation, modification, operations, maintenance, corrective action, assessment, and associated reviews. The provisions establish requirements for records administration, including generation, receipt, preservation, storage, safekeeping, retrieval and final disposition. For activities governed by 10CFR71 or 72, these provisions address the specific requirements of sections 71.135 and 72.174.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

FPL uses the list of records in 10CFR71.135, 10CFR72.174, and Non-mandatory Appendix 17A-1, supplemented by the recommended retention times established in Regulatory Guide 1.28, Position C.2 (Table 1), to establish the types of records that will be created and retained in support of plant operation. Non-mandatory Appendix 17A-1 of NQA-1-1994 lists only those operations phase records having permanent (lifetime) retention; Regulatory Guide 1.28, Table 1, which provides for lifetime, 3, and 10 year (non-permanent) retention periods, does not specifically list operations phase record types. FPL establishes appropriate retention times for non-permanent operations phase records based on similarity to the same record types identified in Table 1 of Regulatory Guide 1.28. Thus, non-permanent records are designated for 3 or 10 year retention, as required by NQA-1-1994, Supplement 17S-1, Sections 2.7 and 2.8. In cases where local or state retention requirements are more restrictive than the regulatory guidance, the local requirements are met. In addition, when using optical or electronic records storage and retrieval systems, FPL complies with NRC guidance in RIS 2000-18. Records of the service lives of all snubbers including the date at which the service life commences and associated installation and maintenance records have lifetime retention.

In establishing provisions for records, FPL commits to compliance with NQA-1, 1994, Basic Requirement 17 and Supplement 17S-1, with the following exception:

- Supplement 17S-1, Section 4.2(b) requires records to be firmly attached in binders or placed in folders or envelopes for storage in steel file cabinets or on shelving in containers. For hard-copy records maintained by FPL plants, the records are suitably stored in steel file cabinets or on shelving in containers, except that methods other than binders, folders or envelopes may be used to organize the records for storage.

**B.16 Plant Maintenance**

FPL establishes controls for the maintenance or modification of items and equipment subject to this QATR to ensure quality at least equivalent to that specified in original design bases and requirements, such that safety related structures, systems and components are maintained in a manner that assures their ability to perform their intended safety function(s). Maintenance activities (both corrective and preventive) are scheduled and planned so as not to unnecessarily compromise the safety of the plant. Permission to release equipment or systems for maintenance is granted by designated operating personnel who are responsible to verify that the equipment or system can be released and determine how long it may be out of service. This includes attention to the potentially degraded degree of protection when one subsystem of a redundant safety system has been removed for maintenance. Release is documented. When equipment is ready to be returned to service, operating personnel place the equipment in operation and verify and document its functional acceptability. In completing maintenance and restoring equipment, attention is given to restoration of normal conditions, such as removal of jumpers or signals used in maintenance or testing, or such as returning valves, breakers or switches to proper operating positions.

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**B. PERFORMANCE/VERIFICATION (CONTINUED)**

In establishing controls for plant maintenance, FPL commits to compliance with NQA-1, 1994, Subpart 2.18, with the following exceptions:

- Section 2.3.a requires cleanliness during maintenance to be in accordance with Subpart 2.1. FPL commitment to Subpart 2.1 is described in Section B.7.
- Section 2.7 requires the application of Subparts 2.4, 2.5 and 2.8 for inspections of installation activities. FPL commitment to Subparts 2.5 and 2.8 is limited to activities comparable in nature and extent to those during original construction (see Section B.12). Inspections (verifications) of maintenance or modification activities are established, conducted and documented as required by Section B.12 to establish a suitable level of confidence in affected structures, systems, or components. The inspection criteria in Subparts 2.5 and 2.8 may be used in establishing required inspections for maintenance and minor modifications.

**B.17 Computer Software Control**

FPL establishes and implements provisions to assure that computer software used in applications affecting safety is prepared, documented, verified and tested, and used such that the expected output is obtained and configuration control maintained. To this end, FPL commits to compliance with the requirements of NQA-1 1994, Supplement 11S-2 and Subpart 2.7 to establish the appropriate provisions.

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**C. ASSESSMENT**

**C.1 Methodology**

FPL establishes programs for reviews and assessments to verify that activities covered by this QATR are performed in compliance with the requirements established, review significant proposed plant changes or tests, verify that reportable events are promptly investigated and corrected, and detect trends which may not be apparent to the day-to-day observer. These programs are, themselves, reviewed for effectiveness as part of the overall assessment process, as described herein.

FPL uses self-assessment (performed by or for the group responsible for the activity being assessed) and independent assessment (performed by the Quality Assurance organization) to monitor overall performance, identify anomalous performance and precursors of potential problems, and verify satisfactory resolution of problems. Persons responsible for carrying out these assessments are cognizant of day-to-day activities such that they can act in a management advisory function with respect to the scope of the assessment. Both self-assessments and independent assessments are accomplished using instructions or procedures that provide detail commensurate with the assessed activity's complexity and importance to safety.

FPL plants maintain on-site review groups to review overall plant performance and advise site management on matters related to nuclear safety. Appendix A establishes the requirements for these committees.

FPL periodically performs independent reviews of matters involving the safe operation of its fleet of nuclear power plants, with a minimum of one such review being conducted for each generating site each year. The review addresses matters that plant and corporate management determine warrant special attention, such as plant programs, performance trends, employee concerns, or matters related to safe plant operations. The review is performed by a team consisting of personnel with experience and competence in the activities being reviewed, but independent (from cost and schedule considerations) from the organizations responsible for those activities. The review is supplemented by outside consultants or organizations as necessary to ensure the team has the requisite expertise and competence. Results are documented and reported to responsible management.

In establishing the independent assessment program, FPL commits to compliance with NQA-1, 1994, Basic Requirement 18 and Supplement 18S-1, with the following clarification:

- The term "audit" and "independent assessment" are synonymous and can be used interchangeably.

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**C. ASSESSMENT (CONTINUED)**

**C.2 Self-assessment**

FPL uses self-assessments performed by or for the group responsible for the activity being assessed to identify anomalous performance and precursors of potential problems. When line organizations perform self-assessments, their focus is technically and performance oriented with focus on the quality of the end product as well as on compliance with procedures and processes. The objective of self-assessment is to verify compliance, improve performance and achieve excellence. Results of self-assessments are reported in an understandable form and in a timely fashion to a level of management having the authority to effect corrective action and verify satisfactory resolution of problems.

**C.3 Independent Assessment**

FPL has established a program of planned and periodic performance-based independent assessments to monitor overall performance and confirm that activities affecting quality comply with the QAP and that the QAP is effectively implemented. The organization performing independent assessment (Quality Assurance) is technically and performance oriented, with its focus on the quality of the end product and the effective implementation of procedures and processes. Persons performing independent assessments do not have direct responsibility for any area being assessed, and do not report to a management position with immediate responsibility for the activity being assessed. FPL assessment resources may be supplemented with technical specialists as needed. The independent assessment program will be reviewed at least semiannually through one of the following: an Independent Evaluation of QA/QC, review by a designated management representative, or review by a designated management review body.

The independent assessment program provides comprehensive independent evaluations of activities and procedures. Planning for independent assessments identifies the characteristics and activities to be assessed and the relevant performance and/or acceptance criteria. As appropriate to the scope of an assessment, these criteria include related plant Technical Specification requirements. Independent assessments are then conducted using these predetermined criteria. Scheduling and resource allocation for independent assessments are based on the status, performance, and effect on safety of the activity or process (topic) being assessed. Scheduling is dynamic to provide for response to developing performance issues and resources are supplemented as necessary when QAP effectiveness is in question. Activities having immediate effect on safety, such as operations or maintenance, are independently assessed on a routine basis.



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**C. ASSESSMENT (CONTINUED)**

Other topics, as identified in Table 1, where performance metrics, corrective action history and effectiveness, process/personnel stability, self-assessments, and response to operating experience provide sufficient evidence of satisfactory performance, may receive less frequent independent assessment attention, while topics with recent process/personnel changes or unsatisfactory or declining performance trends receive more frequent assessments. A Quality Assurance expert panel documents the bases for its decisions regarding which topics (from Table 1) receive independent assessment at what frequency, such that activities covered by Table 1, are reviewed annually as candidates for independent assessment. Annual review documentation is retained as a quality record according to Section B.15 and will be available for NRC review.

In the event the expert panel review process is not used to determine frequencies, the topics in Table 1 are audited as a minimum of biennially. A 90-day grace period may be applied to this periodicity. When the grace period is applied, the next due date for the activity is based upon the original scheduled date. However, in all cases the periodicity shall not exceed two years year plus 90 days.

Certain activities, as identified in Table 2, receive independent assessments at frequencies established by related NRC rules. In addition, independent assessments include examination of selected procedures to verify that the procedure review and revision controls of Section B.14 are effectively implemented.

Results of independent assessments are reported in an understandable form and in a timely fashion to a level of management having the authority to effect corrective action. Quality Assurance conducts timely follow-up action, including re-assessment of deficient areas, as necessary, to establish adequacy of corrective actions.

Independent assessment results are documented and reviewed by Quality Assurance management and by management having responsibility for the area assessed. In addition, Quality Assurance activities are periodically assessed for effectiveness. Results are documented and reported to responsible management.

Quality Assurance provides for assessment of work carried out under the requirements of the QAP that is delegated to other (non-FPL) entities.

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**Table 1  
Topics Subject to Performance-based Independent Assessment Considerations**

Topic***	Primary 10CFR50, Appendix B Criteria*
<b>Engineering &amp; Configuration Management</b> <ul style="list-style-type: none"> <li>• Modifications</li> <li>• System Engineering</li> <li>• Accident Analysis</li> <li>• Core Design</li> </ul>	III – Design Control IX – Control of Special Processes
<b>Procurement &amp; Nuclear Materials Management</b>	IV – Procurement Document Control VII – Control of Purchased Material, Equipment and Services VIII – Identification and Control of Materials, Parts and Components XIII – Handling, Storage and Shipping XV – Nonconforming Materials, Parts, and Components
<b>QA Programs</b> <ul style="list-style-type: none"> <li>• Organization</li> <li>• On-Site Review Groups</li> <li>• Procedures</li> <li>• Licensing</li> <li>• QA Records</li> <li>• Document Control</li> </ul>	VI – Document Control XVII – Quality Assurance Records
<b>Inspection/Quality Verification</b> <ul style="list-style-type: none"> <li>• Quality Control</li> <li>• In-service Inspection</li> <li>• Nondestructive Examination</li> </ul>	IX – Control of Special Processes X – Inspection XIV – Inspection, Test and Operating Status XV – Nonconforming Materials, Parts and Components
<b>Corrective Action Program &amp; Self-Assessment</b>	XVI – Corrective Action

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**Table 1  
Topics Subject to Performance-based Independent Assessment Considerations  
(Continued)**

Topic***	Primary 10CFR50, Appendix B Criteria*
Independent Evaluation of QA/QC <ul style="list-style-type: none"> <li>• Quality Assurance Programs</li> <li>• QC Inspection</li> <li>• Independent Assessment</li> </ul>	II – Quality Assurance Program X – Inspection XVIII – Audits
Training/Qualification <ul style="list-style-type: none"> <li>• Operator Training</li> <li>• Technical/Support Staff Training</li> <li>• Staff Qualifications</li> </ul>	II – Quality Assurance Program
Operations <ul style="list-style-type: none"> <li>• Plant Operations**</li> <li>• Equipment Control</li> <li>• Refueling</li> </ul>	XI – Test Control XII – Control of Measuring and Test Equipment XIV – Inspection, Test and Operating Status
Maintenance** <ul style="list-style-type: none"> <li>• Preventive</li> <li>• Corrective</li> <li>• Planning/Scheduling</li> </ul>	VIII – Identification and Control of Materials, Parts and Components IX – Control of Special Processes XI – Test control XII – Control of Measuring and Test Equipment XIII – Handling, Storage and Shipping XIV – Inspection, Test and Operating Status XV – Nonconforming Materials, Parts and Components
Radiological Protection <ul style="list-style-type: none"> <li>• Environmental Monitoring</li> <li>• Radiation Protection</li> <li>• Radioactive Waste Control</li> <li>• Radiological Environmental Monitoring/Environmental Protection</li> <li>• Industrial Radiation Safety</li> </ul>	N/A – (10CFR71, Subpart H)
Chemistry & Effluents	N/A

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**Table 1  
Topics Subject to Performance-based Independent Assessment Considerations  
(Continued)**

Topic***	Primary 10CFR50, Appendix B Criteria*
Nuclear Information Management	III – Design Control
• Software Quality Assurance	XI – Test Control

\* The identified criteria are the ones primarily controlling important aspects of the activity. Other criteria have general applicability to nearly all activities, such as Criterion I, V, VI, XVI and XVII, and are therefore not listed for each topic.

\*\* Subject to assessment on a routine basis.

\*\*\* Topic titles in this table may vary, however, all program elements listed will be covered.

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**Table 2  
Topics Subject to Regulatory-related Independent Assessment Frequencies**

Topic	Frequency	Basis
Emergency Planning*	Annual	10CFR50.54(t)
Fitness for Duty	Annual	10CFR26.80
Access Authorization (Contractor Programs)	Biennial Annual	10CFR73.56(g)
Site Security*	Annual	10CFR73.55(g)(4)
Fire Protection <ul style="list-style-type: none"> <li>• Prevention, Detection and Response</li> <li>• Alternate Shutdown Capability</li> </ul>	Biennial (Includes use of a non-site, qualified fire protection specialist on a triennial basis)	NRC Administrative Letter 95-06

\* May be extended up to two years based upon performance data.

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**APPENDICES**

**Appendix A: On-Site Review Group**

**1.0 General**

The On-Site Review Group (ORG) is responsible to the plant manager for advice on all plant-related matters concerning nuclear safety. The requirements for personnel, committee composition, meeting frequency, quorum and meeting records are identified in implementing procedures. A general description of these areas is included below.

(Note: Each plant may name this on-site review group function differently. Regardless of the name, these requirements are met.)

In discharging its review responsibilities, the ORG shall keep safety considerations paramount when opposed to cost or schedule considerations. Should a voting member at a particular meeting have direct responsibility for an item under review where a conflict of such considerations is likely, that member shall be replaced (to fill the quorum) by another voting member not having such potential conflict.

**2.0 Composition**

The ORG is comprised of a minimum number of members as designated by the plant manager and detailed in implementing procedures. All members are qualified in accordance with implementing procedure requirements that meet site Technical Specifications. Membership includes representation from at least the following disciplines: Operations, Maintenance, Engineering, Radiation Protection and Chemistry. The ORG collectively has, or has access to, the experience and competence necessary to review the areas of (1) nuclear power plant operations, (2) nuclear engineering, (3) chemistry and radiochemistry, (4) metallurgy, (5) nondestructive testing, (6) instrumentation and control, (7) radiological safety, (8) mechanical and electrical engineering, (9) administrative controls and quality assurance practices, and (10) other fields associated with the unique characteristics of the plant. Consultants may be utilized to provide expert advice as needed.

Alternate chairmen and members may be appointed by the plant manager to serve on a permanent or temporary basis.

**3.0 Meetings**

The ORG meets commensurate with the scope of activities, but minimal frequency requirements are specified in procedures.

Rules for a quorum are established and adhered to. However, no more than a minority of alternates may participate as voting members at any one time.

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**Appendix A: On-Site Review Group (Continued)**

The ORG reviews at least the following:

- (1) Changes to the Offsite Dose Calculation Manual (OCDM) and the Process Control Program (PCP). In addition, changes to Radwaste Treatment Systems are reviewed for St. Lucie and Seabrook Plants.
- (2) Proposed tests or experiments that affect nuclear safety.
- (3) Proposed changes or modifications to plant systems or equipment that affect nuclear safety.
- (4) Written 10CFR50.59/72.48 evaluations to verify that changes to the facility or procedures, tests or experiments do not involve a change in the Technical Specifications or require prior NRC review.
- (5) Proposed changes to Operating License and Technical Specifications.
- (6) Reports covering violations of applicable NRC statutes, codes, regulations, orders, Technical Specifications, or license requirements or of internal documents having nuclear safety significance.
- (7) Reports of special reviews and investigations as requested by the Site Vice President, Site Director, or plant manager.
- (8) Events reportable in writing to the NRC according to applicable regulations.
- (9) Reports of significant operating abnormalities or deviations from the normal and expected performance of plant equipment or systems that affect nuclear safety.
- (10) All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.
- (11) Review of any accidental, unplanned, or uncontrolled radioactivity release.
- (12) Any other matter related to nuclear safety requested by the Site Vice President, Site Director or plant manager, selected by ORG members, or referred to the ORG by other site or corporate organizations.
- (13) Review of Diesel Fuel Oil Testing Program and implementing procedures (Turkey Point Only)

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**Appendix A: On-Site Review Group (Continued)**

- (14) Review and documentation of judgment concerning prolonged operation in bypass, channel trip, and/or repair of defective protection channels of process variables placed in bypass since the last ORG meeting. (St. Lucie only)

Reviews of Items (6) through (12) include results of any investigations made and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event."

**5.0 Authority**

The ORG:

- Recommends in writing to the plant manager approval or disapproval of items reviewed.
- Renders determinations in writing with regards to whether Items (1) through (5), or changes thereto, require prior NRC approval in accordance with 10CFR50.59/72.48.
- Provides written notification to level(s) above the plant manager of any disagreements between the ORG and the plant manager.

The ORG shall advise the plant manager on matters related to safe operation and overall performance. The ORG has authority to obtain access to records and personnel as needed to conduct reviews.

In carrying out its review responsibilities, the ORG may establish subcommittees or use designated organizational units to carry out the review. The subcommittees or organizational units must regularly report results of reviews for full committee consideration and may recommend items for full committee review as warranted.

**6.0 Records**

The ORG maintains written minutes of each ORG meeting, to include identification of items reviewed, and decisions and recommendations of the Committee. Copies of the minutes are provided to the on-site and off-site management position(s) above the plant manager, and to other management responsible for the areas reviewed as necessary. ORG records are retained according to Section B.15.



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**Appendix B: Procedures**

FPL uses procedures to provide an approved, preplanned method of conducting activities affecting safety. As stated in Position C.1 of Regulatory Guide 1.33, Revision 2, FPL commits to use Appendix A of Regulatory Guide 1.33 as guidance for establishing the types of procedures that are necessary to control and support plant operation. Procedures are sufficiently detailed for a qualified individual to perform the required function without direct supervision, but may not provide a complete description of the system or plant process.

Guidance is established to identify the manner in which procedures are to be implemented, including identification of those tasks that require (1) the written procedure to be present and followed step by step while the task is being performed, (2) the user to have committed the procedure steps to memory, (3) verification of completion of significant steps, as by initials or signatures or use of check-off lists. Procedures that are required to be present and referred to directly are those developed for extensive or complex jobs where reliance on memory cannot be trusted, tasks that are infrequently performed, and tasks where steps must be performed in a specified sequence. When documentation of an action is specified, the necessary data is recorded as the task is performed.

The format of procedures may vary from plant to plant within FPL; however, procedures include the following elements, as appropriate to the purpose or task covered. These elements are not intended to imply a specific format is required:

**Title/Status:** Each procedure is given a title descriptive of the work or subject it addresses, and includes a revision number and/or date and an approval status.

**Purpose/Statement of Applicability:** The purpose for which the procedure is intended is clearly stated (if not clear from the title).

**References:** Applicable references, including reference to appropriate Technical Specifications, are included. References are included within the body of the procedure when the sequence of steps requires other tasks to be performed (according to the reference) prior to or concurrent with a particular step.

**Prerequisites:** Identifies those independent actions or procedures that must be accomplished and plant conditions which must exist prior to performing the procedure. A prerequisite applicable to only a specific portion of a procedure is so identified.

**Precautions:** Alert the user to those important measures to be used to protect equipment and personnel, including the public, or to avoid an abnormal or emergency situation during performance of the procedure. Cautionary notes applicable to specific steps are included in the main body of the procedure and are identified as such.

**Limitations and Actions:** Limitations on the parameters being controlled and appropriate corrective measures to return the parameter to the normal control band are specified.

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**Appendix B: Procedures (Continued)**

**Main Body:** Contains the step-by-step instructions in the degree of detail necessary for performing the required function or task.

**Acceptance Criteria:** The quantitative or qualitative criteria against which the success or failure (as of a test-type activity) of the step or action would be judged.

**Check-off Lists:** Complex procedures use check-off lists (aka checklists) which may be included as part of the procedure or appended to it.

Certain types of procedures governing generating site activities are common to all plants. Individual plant terminology may vary from the following, and some procedure types may be combined. Sufficient procedures are maintained to provide appropriate direction for these activities. In amplification to the appropriate elements above, such procedures are further defined as follows:

**Calibration and Test Procedures:** Contain instructions for periodic calibration and testing of safety related instrumentation and control systems, and for periodic calibration of measuring and test equipment used in activities affecting the quality of these systems. These procedures provide for meeting surveillance requirements and for assuring measurement accuracy adequate to keep safety related parameters within operational and safety limits.

**Chemical-radiochemical Control Procedures:** Contain instructions for chemical and radiochemical activities such as the nature and frequency of sampling and analyses; maintaining coolant quality within prescribed limits; limitations on concentrations of agents that could cause corrosive attack, foul heat transfer surfaces or become sources of radiation hazards due to activation; control, treatment and management of radioactive wastes and control of radioactive calibration sources, including shipping.

**Emergency Plan Implementing Procedures:** Contain instructions for activating the Emergency Response Organization and facilities, protective action levels, organizing emergency response actions, establishing necessary communications with local, state and federal agencies, and for periodically testing the procedures, communications and alarm systems to assure they function properly. Format and content of such procedures are such that requirements of each site's NRC approved Emergency Plan are met.

**Emergency Procedures:** Contain instructions for response to potential emergencies so that a trained operator will know in advance the expected course of events that will identify an emergency and the immediate actions that should be taken in response. Format and content of emergency procedures are based on regulatory and Owner's Group(s) guidance that identify potential emergency conditions and generally require such procedures to include a title, symptoms to aid in identification of the nature of the emergency, automatic actions to be expected from protective systems, immediate operator actions for operation of controls or confirmation of automatic actions, and subsequent operator actions to return the reactor to a normal condition or provide for a safe extended shutdown period under abnormal or emergency conditions.

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**Appendix B: Procedures (Continued)**

**Fuel Handling Procedures:** Contain instructions for core alterations, accountability of fuel and partial or complete refueling operations that include, for example, continuous monitoring of neutron flux throughout core loading, periodic data recording, audible annunciation of abnormal flux increases, and evaluation of core neutron multiplication to verify safety of loading increments. Procedures are also provided for receipt and inspection of new fuel, and for fuel movements in the spent fuel storage areas. Fuel handling procedures include prerequisites to verify the status of systems required for fuel handling and movement; inspection of replacement fuel and control rods; designation of proper tools, proper conditions for spent fuel movement, proper conditions for fuel cask loading and movement; and status of interlocks, reactor trip circuits and mode switches. These procedures provide requirements for refueling, including proper sequence, orientation and seating of fuel and components, rules for minimum operable instrumentation, actions for response to fuel damage, verification of shutdown margin, communications between the control room and the fuel handling station, independent verification of fuel and component locations, criteria for stopping fuel movements, and documentation of final fuel and component serial numbers and locations.

**Maintenance Procedures:** Contain instructions in sufficient detail to permit maintenance work to be performed correctly and safely, and include provisions for conducting and recording results of required inspections or tests. Appropriate referencing to other procedures or vendor manuals is provided. Instructions are also provided, although not necessarily in Maintenance Procedures, for equipment removal and return to service, and appropriate radiation protection measures (such as protective clothing and radiation monitoring).

**Power Operation and Load Changing Procedures:** Contain instructions for steady-state power operation and load changing that include provisions for use of control rods, chemical shim, coolant flow channel control, or for any other system available for short- or long-term control of reactivity, making deliberate load changes and adjusting operating parameters.

**Process Monitoring Procedures:** Contain instructions for monitoring performance of plant systems to assure that core thermal margins and coolant quality are maintained in acceptable status at all times, that integrity of fission product barriers is maintained, and that engineered safety features and emergency equipment are in a state of readiness to keep the plant in a safe condition if needed. Maximum and minimum limits for process parameters are appropriately identified.

**Radiation Control Procedures:** Contain instructions for implementation of program requirements necessary to meet regulatory commitments, including acquisition of data and use of equipment to perform necessary radiation surveys, measurements and evaluations for the assessment and control of radiation hazards. These procedures provide requirements for monitoring both external and internal exposures of employees, utilizing accepted techniques; routine radiation surveys of work areas; environmental monitoring in the vicinity of the plant; radiation monitoring of maintenance and special work activities, and for maintaining records demonstrating the adequacy of measures taken to control radiation exposures to employees and others.

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**Appendix B: Procedures (Continued)**

**Shutdown Procedures:** Contain instructions for operations during controlled shutdown and following reactor trips, and include instructions for establishing or maintaining hot standby or cold shutdown conditions, as applicable. The major steps involved in shutting down the plant are specified, including instructions for such actions as monitoring and controlling reactivity, load reduction, cooldown rates, activating or deactivating equipment, and provisions for decay heat removal. Check-off lists are used, as appropriate, for confirming completion of major steps in proper sequence.

**Start-up Procedures:** Contain instructions for starting the reactor from cold or hot conditions and establishing power operation. This includes documented determination that prerequisites have been met, including confirmation that necessary instrumentation is operable and properly set; necessary system procedures, tests and calibrations have been completed; and required approvals have been obtained. The main body includes the major steps of the start-up sequence, including reference to appropriate systems procedures. Start-up procedures contain check-off lists where appropriate.

**System Procedures:** Contain instructions for energizing, filling, venting, draining, starting up, shutting down, changing modes of operation and other instructions appropriate for operations of systems related to the safety of the plant. Separate procedures may be developed for correcting off-normal conditions for those events where system complexity may lead to operator uncertainty. System procedures contain check-off lists where appropriate.

**Test and Inspection Procedures:** Contain the objectives, acceptance criteria, prerequisites for performing the test or inspection, limiting conditions, and appropriate instructions for performing the test or inspection. These procedures also specify any special equipment or calibrations required to conduct the test or inspection and provide for appropriate documentation and evaluation by responsible authority to assure test or inspection requirements have been satisfied. Where necessary, hold or witness points are identified within the procedures and require appropriate approval for the work to continue beyond the designated point. These procedures provide for recording the date, identification of those performing the test or inspection, as-found condition, corrective actions performed (if any), and as-left condition, as appropriate for the subject test or inspection.

While not specifically a procedure type, **Temporary Procedures** may be used to direct operations during testing, refueling, maintenance and modifications; to provide guidance in unusual situations not within the scope of normal procedures; and to insure orderly and uniform operations for short periods when the plant, a system, or a component of a system is performing in a manner not covered by existing detailed procedures, or has been modified or affected in such manner that portions of existing procedures do not apply. Temporary Procedures include designation of the period of time during which they may be used.

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**Appendix C: Definitions**

FPL uses the definitions of terms as provided in Section 4 of the Introduction of NQA-1 1994 in interpreting the requirements of NQA-1 and other standards to which the QATR commits. In addition, definitions are provided for the following terms not covered in NQA-1:

**Administrative Controls:** Rules, orders, instructions, procedures, policies, practices and designations of authority and responsibility.

**Emergency Procedures:** See Appendix B.

**Experiments:** performance of plant operations carried out under controlled conditions in order to establish characteristics or values not previously known.

**Independent Assessment:** Planned and documented activity performed to determine by investigation, examination, observation, or evaluation of objective evidence the adequacy of and compliance with established procedures, instructions, drawings, and other applicable documents, and to determine the effectiveness of implementation. Independent Assessment, as used in this QATR, is considered equivalent to the term "audit".

**Independent Review:** Review completed by personnel not having direct responsibility for the work function under review whether they operate as part of an organizational unit or individual staff members (see Review).

**Maintenance and Modification Procedures:** Written procedures defining the policies and practices by which structures, mechanical, electrical and instrumentation and control systems, and components thereof, are kept in a condition of good repair or efficiency so that they are capable of performing their intended functions.

**Nuclear Power Plant:** Any plant using a nuclear reactor to produce electric power, process steam or space heating.

**Off normal Condition Procedures:** Written procedures which specify operator actions for restoring an operating variable to its normal controlled value when it departs from its range, or to restore normal operating conditions following a perturbation. Such actions are invoked following an operator observation or an annunciator alarm indicating a condition which, if not corrected, could degenerate into a condition requiring action under an emergency procedure. (May be called Abnormal, Off-normal or other term conveying the same intent)

**On-site Operating Organization:** On-site personnel concerned with the operation, maintenance and certain technical services.

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**Appendix C: Definitions (Continued)**

**Operating Activities:** Work functions associated with normal operation and maintenance of the plant, and technical services routinely assigned to the on-site operating organization.

**Operating Procedures:** Written procedures defining the normal methods, means and limits of operation of the nuclear power plant, a plant system or systems, or processes, including actions to be taken by operating personnel for removal from and return to service equipment on which maintenance is to be or has been performed.

**Operational Phase:** That period of time during which the principal activity is associated with normal operation of the plant. This phase of plant life is considered to begin formally with commencement of initial fuel loading and ends with plant decommissioning.

**Quality Instruction:** Any instruction or procedure that defines programmatic controls needed to implement the Quality Assurance Topical Report. These instructions and procedures consist of documents specifically identified as "Quality Instructions" and other equivalent administrative procedures and instructions. Quality Instructions do not include lower tier work procedures or instructions where the QA program controls are contained in other documents. For example, Quality Instruction includes the plant procedure or instruction that defines the programmatic requirements for control of M&TE but not the procedure for calibrating a particular piece of M&TE.

**Quality Related:** This classification is applied to selected equipment, components, structures and services designed to support and/or protect the safety function of safety related equipment. Quality Assurance Program elements are applied with a graded approach to quality to an extent that is commensurate with the item's importance to safety. Implementing documents establish program element applicability.

These include activities those items or related services that are not safety related and are in one or more of the following categories:

1. Equipment, components and structures designed to meet seismic requirements or whose failure could:
  - (a) damage safety related equipment such that the equipment would be prevented from performing its safety function, or
  - (b) result in releases exceeding the exposure guidelines of the Offsite Dose Calculation Manual.

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**Appendix C: Definitions (Continued)**

2. *Fire protection equipment*:
  - (a) required to protect safety related equipment, or
  - (b) whose failure could result in water damage to safety related equipment which could prevent the equipment from performing its safety function, or
  - (c) required to maintain the integrity of a fire barrier necessary to protect safety related equipment.
3. A partial or total loss of function of a radioactive confinement system that could result in an accidental, unplanned, or uncontrolled release of radioactivity exceeding the Offsite Dose Calculation Manual limits.
4. Equipment whose failure under normal operating conditions or an anticipated transient, results in:
  - (a) exceeding a safety limit specified in the Technical Specifications, or
  - (b) initiation of a UFSAR Design Basis Accident, or
  - (c) the reactor coolant system not being in a controlled or design condition while operating or shutdown.
5. Instrumentation, equipment, components, or structures required to be operable by the Technical Specifications.
6. *Instrumentation that is essential to preventing or monitoring release of radioactive material to the environment which could exceed the guidelines of the Offsite Dose Calculation Manual.*

**Review:** A deliberately critical examination, including observation of plant operation, evaluation of assessment results, procedures, certain contemplated actions, and after-the-fact investigations of abnormal conditions.

**Supervision:** Direction of personnel activities or monitoring of plant functions by an individual responsible and accountable for the activities they direct or monitor.

**Surveillance Testing:** Periodic testing to verify that safety related structures, systems and components continue to function or are in a state of readiness to perform their functions, and to provide assurance that failures or substandard performance do not remain undetected and that the required reliability of safety related systems is maintained. Such functions include keeping parameters within normal bounds or acting to put the plant in a safe condition if they exceed normal bounds.

**System:** An integral part of nuclear power plant comprising components which may be operated or used as a separate entity to perform a specific function.

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and FPL Energy Duane Arnold, LLC  
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**Appendix D: Revision Summaries**

<b>Revision/Section</b>	<b>Change/Reason for Change</b>	<b>Basis for Meeting 10CFR50</b>
Revision 0, 01/03/06	New Program	NRC SE dated .....



**ATTACHMENT 4**

**QATR Exceptions/Alternatives**

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

<b>QATR Exception</b>	<b>Source/Basis for Acceptance</b>
<p><b>A.5</b></p> <p>For Supplement 2S-1: Inspections, examinations or tests may be performed by individuals in the same organization as that which performed the work, provided that (a) the qualifications of the inspector for an activity are equal to or better than the minimum qualifications for persons performing the activity, (b) the work is within the skills of personnel and/or is addressed by procedures, and (c) if work involves breaching a pressure-retaining item, the quality of the work can be demonstrated through a functional test. When a, b and c are not met, inspections, examinations or tests are carried out by individuals certified in accordance with Supplement 2S-1. Individuals performing visual inspections required by the ASME Boiler and Pressure Vessel Code are qualified and certified according to Code requirements.</p>	<p>The purpose of the exception is to permit line personnel at FPL stations, who are in the same organization as that which performed the work, to conduct verification inspections, examinations, measurements, or tests on material products or activities. This exception addresses the training and qualification required of these individuals, and the conditions under which they can conduct these activities. Complementary to this exception is an exception to Non Mandatory Appendix 2A-1, regarding the three levels of qualification/certification of inspection and test personnel (Also see the discussion for the next exception). The exception to Non Mandatory Appendix 2A-1 applies to the same personnel as those covered by the exception to Supplement 2S-1. Since these personnel are trained and qualified to perform the activities as specified under this exception, they do not need to be certified to the three levels contained in Non Mandatory Appendix 2A-1.</p> <p>This exception to Supplement 2S-1 will be implemented through training for personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities that are in the same organization as that which performed the work. FPL will apply this exception only to line personnel performing quality control inspections. It does not apply to quality assurance personnel. The implementation of this exception will ensure that (1) the same level of qualification is required as for those who performed the work, (2) the personnel will be required to have the necessary skills and/or have the verification requirements specified in procedures, and (3) where the work involves the breaching of a pressure boundary, additional assurance of the quality of work can be obtained through a functional test. If the above three factors cannot be met, the inspection responsibility would be assigned to personnel qualified in accordance with the commitment to NQA-1-1994.</p> <p>The alternative meets the requirements of 10 CFR Part 50, Appendix B, Criterion II, by requiring training and qualification of personnel that assures</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
	<p>suitable proficiency is achieved and maintained in the skills necessary to perform quality verification inspections and tests. The individuals qualified in accordance with this alternative participate in a training program that meets the intent of 10 CFR 50.120.</p> <p>This exception was based on the 2005 Nuclear Management Company (NMC) fleet QATR submittal; NMC based it on a previous Palisades exception. This alternative is used by NMC to describe alternative training methods if it implemented line performance of quality control inspections. FPL will also apply it only to line personnel performing quality control inspections. It does not apply to quality assurance personnel. The qualification requirements for this alternative are documented in the basis for the NMC Quality Assurance Topical Report (QATR) Exception A.5 for NQA-1-1994, Supplement 2S-1 in Enclosure 3 of the NMC letter dated March 31, 2003 (ML033070161). The approval for this alternative was originally addressed in a letter from NRC Region III to Consumers Power Company, Docket Nos. 50-155 and 50-255, dated February 27, 1992. The basis for the NMC alternative is that (1) the same level of qualification is required as for the individual who performed the work, (2) the personnel will be required to have the necessary skills and/or the verification requirements will be specified in the procedures/instructions, and (3) where the work involves breaching of a pressure boundary, additional assurance of the quality of work can be obtained through a functional test. Planning for such inspections and tests is performed by individuals meeting qualification requirements equivalent to those specified in 2A-1 and suitably trained for the function.</p> <p>This exception is acceptable for FPL because the basis for the FPL exception is equal to that indicated in the NMC alternative.</p> <p>This exception is taken in the current QA Program Description for Duane Arnold.</p>
<p>A.5                      In lieu of being certified as Level I, II or III in accordance with Non-mandatory Appendix 2A-1 of</p>	<p><i>The purpose of the exception is to allow line personnel at FPL plants who perform inspections and are in the same organization as that which performed the work. These individuals are</i></p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
<p>NQA-1-1994, personnel performing operations phase independent quality verification inspections, examinations, measurements, or tests on material products or activities, that are in the same organization as that which performed the work, will be required to possess the same minimum level of qualification as that required for performing the task being verified. The verification shall be within the skills of these personnel and/or is addressed by procedures. Individuals responsible for the planning of such quality verification inspections and tests (i.e. establishing hold points and acceptance criteria in procedures, or determining who will be responsible for performing the inspections) will meet the qualification requirements equivalent to those contained in Appendix 2A-1 and suitably trained for the function.</p>	<p>qualified in an accredited systematic approach to training-based training program that meets 10 CFR 50.120, have the same minimum level of qualification as the individual performing the task, have the necessary skills, and have the verification requirements specified in procedures, to be exempt from being certified Level I, II, or III as required in NQA-1-1994 Non Mandatory Appendix 2A-1. Complementary to this exception is an exception to NQA-1-1994 Supplement 2S-1, regarding alternative qualifications for inspectors. (Also see the discussion for preceding exception). The purpose of the exception to Supplement 2S-1 is to permit line personnel, who are in the same organization as that which performed the work, to conduct verification inspections, examinations, measurements, or tests on material products or activities. This exception to Non Mandatory Appendix 2A-1, regarding the three levels of qualification/ certification of inspection and test personnel, applies to the same personnel as those covered by the exception to Supplement 2S-1; since these personnel are trained, qualified, and perform the activities as specified under the 2S-1 exception, they do not need to be certified to the three levels contained in Non Mandatory Appendix 2A-1.</p> <p>This alternative meets the requirements of 10 CFR Part 50, Appendix B, Criterion II, by requiring training and qualification of personnel that assures suitable proficiency is achieved and maintained in the skills needed to perform quality verification inspections and tests. The individuals qualified in accordance with this alternative participate in a training program that meets the intent of 10 CFR 50.120.</p> <p>This alternative is similar to the qualification requirements documented in the basis for the Nuclear Management Company Quality Assurance Topical Report (NMC QATR) for a related exception to NQA-1-1994, Supplement 2S-1. The approval of this alternative was originally addressed in a letter from NRC Region III to Consumers Power Company, Docket Nos. 50-155 and 50-255 dated February 27, 1992. The basis for the FPL change is equal to that indicated in the NMC alternative in that (1) the same level of qualification is required, (2) the personnel will be required to have the necessary skills and/or the</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
	<p>verification requirements will be specified in the procedures/instructions, and (3) where the work involves breaching of a pressure boundary, additional assurance of the quality of work can be obtained through a functional test. If the above factors can not be met, the inspection responsibility would be assigned to personnel qualified in accordance with the commitment to NQA-1-1994.</p> <p>This exception is acceptable for FPL because the accredited systematic approach to training-based training program evaluates and qualifies individuals to tasks, and determines minimum requirements relating to education, skills and experience.</p> <p>Individuals responsible for the planning of such quality verification inspections and tests (i.e. establishing hold points and acceptance criteria in procedures, or determining who will be responsible for performing the inspections) will meet the qualification requirements equivalent to those contained in Appendix 2A-1 and suitably trained for the function.</p>
<p>A.5                      In lieu of Supplement 2S-2, FPL will follow the applicable standard cited in the latest version(s) of Section XI of the ASME Boiler and Pressure Vessel Code approved by the NRC for use at FPL sites for qualification of nondestructive examination personnel.</p>	<p>This exception recognizes that later versions of the standard referenced in NQA-1-1994, or other appropriate standards (such as AWS or ASME) may apply in particular situations. Since the particular code used for qualification of inspection, examination or testing personnel is not specified in 10CFR50, Appendix B, this allowance does not effect the QATR's compliance therewith.</p> <p>This exception is taken in the current QA Program Description for Duane Arnold.</p>
<p>A.5                      For Supplement 2S-3: The requirement that prospective Lead Auditors have participated in a minimum of five (5) audits in the previous three (3) years is replaced by the following, "The prospective lead auditor shall demonstrate his/her ability to properly implement the independent assessment (audit) process, as implemented by FPL according to section C.3 of this QATR, to effectively lead an assessment team, and to effectively organize and report results, including participation in at least one nuclear independent assessment or audit within the year preceding the date of qualification." The term "audit" and "independent assessment" are</p>	<p>This exception is taken in the current QAPDs for all FPL plants and, in accordance with the NRC Staff's review criteria no further explanation is required. NRC review criteria states "Current exceptions/alternatives that are already incorporated into existing facility QAPDs do not need to be explained."</p> <p>The last sentence represents a terminology choice made by FPL and has no effect on applicability of the requirements of NQA-1.</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
<p>synonymous and may be used interchangeably throughout the QAP.</p>	
<p><b>A.5</b>                      For Supplement 2S-3: FPL may apply a 90-day grace period to the requirement for a documented annual evaluation of lead auditor proficiency. When the grace period is applied, the next due date for the activity is based upon the original scheduled date. However, in all cases the periodicity shall not exceed one year plus 90 days.</p>	<p>By letter dated December 17, 1997, Rochester Gas &amp; Electric transmitted a proposed revision to the R. E. Ginna Nuclear Power Plant Quality Assurance Program for Station Operation.</p> <p>RG&amp;E proposed a 25% grace period not to exceed 90 days, be applied to frequencies for periodic activities described in the QAPSO and regulatory guides and standards listed in the QAPSO.</p> <p>In response to NRC request for additional information (RAI), RG&amp;E limited its request to the following specific activities:</p> <ul style="list-style-type: none"> <li>Internal Audits</li> <li>Supplier Audits</li> <li>Supplier Evaluations</li> <li>Annual Assessment of Lead Auditor Qualification</li> <li>Annual Evaluations of Inspection, Examination, and Testing Personnel</li> </ul> <p>This exception was approved via 7/22/1998 letter from G.S. Vissing of the NRC to Dr. R. Mecredy of Rochester Gas and Electric.</p> <p>The basis of approval was that for activities deferred in accordance with the 90-day "grace period", the next performance date for such activities will be based on their originally scheduled date, i.e., in all cases, the periodicity for these activities will not be allowed to exceed the original commitment plus 90 days.</p> <p>The basis is applicable to FPL and satisfied as follows:</p> <p>Annual assessment of lead auditor proficiency is one of the periodic activities included within the scope of NRC approval.</p> <p>FPL commits that when the 90-day "grace period" is applied that the next performance date is based on the original scheduled date.</p> <p>FPL commits that in all cases the periodicity for the activity will not be allowed to exceed 90 days.</p> <p>This exception is included in the current QA</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
	Program Descriptions for St. Lucie, Turkey Point, and Seabrook.
<p><b>B.4</b>                      For Supplement 4S-1, Section 2.3, which requires procurement documents to require a quality program that complies with NQA-1, FPL may apply other nationally recognized and NRC endorsed quality standards, such as N45.2, as appropriate to the circumstances of the procurement.</p>	<p>This exception is necessary because some existing long-term FPL purchases have imposed ANSI N45.2, or other appropriate quality standards. Where these standards can be shown to be equivalent to NQA-1, FPL will not require the procurement to be changed. For future procurements NQA-1 or an alternative standard endorsed by the NRC, will be specified.</p> <p>Since the NRC has endorsed both ANSI N45.2 and NQA-1, either standard can be imposed on suppliers to meet provisions of 10CFR50, Appendix B.</p> <p>This exception is included in the current QA Program Description for Duane Arnold.</p>
<p><b>B.4</b>                      For Supplement 7S-1, Section 8.1, documentary evidence that items conform to procurement requirements need not be available at the site prior to item installation, but will be available at the site prior to placing reliance on the item for its intended safety function.</p>	<p>This exception was based on the 2005 NMC fleet QATR submittal; MMC based it of a previous Palisades exception. This alternative is acceptable for FPL because it still ensures that safety-related equipment will meet 10 CFR 50, Appendix B requirements for control of purchased items prior to their being made operable.</p> <p>This exception is taken in the current QA Program Description for Duane Arnold.</p>
<p><b>B.4</b>                      For Supplement 4S-1 and Supplement 7S-1, FPL will use the guidance contained in Generic Letter 89-02/EPRI NP-5652 and Generic Letter 91-05 to procure Commercial Grade Items in lieu of these requirements.</p>	<p>Exception to NQA-1-1994 Supplement 4S-1 and Supplement 7S-1, regarding an alternate for procurement of Commercial Grade Items: This exception was based on the 2005 NMC fleet QATR submittal; NMC based it on a previous Palisades exception. Nuclear Management Company used this exception to establish alternate standards for purchase of Commercial Grade Items. The Standard NQA-1-1994 does not address commercial grade items adequately, therefore an exception to NQA-1-1994 Supplements 4S-1 and 7S-1 is needed. The NRC staff conditionally endorses EPRI NP-5652, "Guideline for the Utilization of Commercial Grade Items in Nuclear Safety Related Applications (NCIG-07), in Generic Letter 89-02, "Actions to Improve the Dedication of Counterfeit and Fraudulently Marketed Products." Generic Letter (91-05), Licensee Commercial Grade Procurement and Dedication Programs" provides additional applicable guidance. This exception is</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
	acceptable and necessary to assure the quality of procured vendor products.
<p><b>B.4</b></p> <p>For commercial grade calibration services from a supplier that has been accredited by a nationally recognized accrediting body (NAVLAP or other accrediting body recognized by NAVLAP via a Mutual Recognition Agreement (MRA)), FPL may accept the service subject to the restrictions noted in Section B.4 above instead of Supplement 4S-1 and Supplement 7S-1.</p>	<p>FPL may accept of a supplier of commercial grade calibration services other than by audit. This meets Criterion VII of 10 CFR 50, Appendix B insofar as measures are established to assure that calibration services conform to the procurement documents by source evaluation and selection and objective evidence of quality furnished by the calibration supplier, as appropriate. Reference the SER contained in NRC letter from D. S. Collins to G. R. Overbeck, APS.</p> <p>Additionally, the SER states that "When purchasing commercial-grade calibration services from calibration laboratories accredited by a nationally-recognized accrediting body ... accreditation may be accepted in lieu of the Purchaser imposing a QA Program consistent with ANSI N45.2-1971, provided all the following are met:</p> <ol style="list-style-type: none"> <li>1. The accreditation is to ANSI/ISO/IEC 17025.</li> <li>2. The accrediting body is either NVLAP or an accrediting body recognized by NVLAP through an MRA.</li> <li>3. The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.</li> <li>4. The purchase documents impose additional technical and administrative requirements, as necessary, to satisfy APS QA Program and technical requirements.</li> <li>5. The purchase documents require reporting as-found calibration data when calibrated items are found to be out-of-tolerance.</li> </ol> <p>However the SER notes that the NRC staff's evaluation and approval are limited to NVLP and to A2LA accreditation, which is recognized by NVLP through the ILAC MRA.</p> <p>FPLQATR Section B.4 specifies:</p>



**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
	<p>When purchasing commercial grade calibration services from a supplier that has been accredited by a nationally recognized accrediting body, FPL may accept the accreditation in lieu of performing an audit, accepting an audit by another licensee or conducting a commercial grade survey. In order to accept the accreditation FPL will perform a documented review of the supplier's accreditation. The review shall, as a minimum, verify all of the following:</p> <ul style="list-style-type: none"> <li>(a) The accreditation is to ANSI/ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories,"</li> <li>(b) The accrediting body is NVLAP (National Voluntary Laboratory Accreditation Program) or A2LA (American Association for Laboratory Accreditation).</li> <li>(c) The published Scope of Accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.</li> </ul> <p>Additionally normal FPL procurement controls for calibration services require: (1) the reporting of as-found calibration data when calibrated items are found to be out-of-tolerance, (2) identification of laboratory equipment / standards used, and (3) imposition of additional technical and administrative requirements, as necessary, to satisfy the FPL QA Program and technical requirements.</p> <p>Therefore, FPL meets the applicable bases.</p> <p>The SER further states:</p> <p>In lieu of performing an audit, accepting an audit by another licensee, or performing a commercial-grade survey, a documented review of the supplier's accreditation shall be performed by the purchaser. This review shall include, at a minimum, verification of all of the following:</p> <ul style="list-style-type: none"> <li>1. The accreditation is to ANSI/ISO/IEC 17025.</li> <li>2. The accrediting body is either NVLAP or an accrediting body recognized by</li> </ul>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
	<p>NVLAP through MRA..</p> <p>3. The published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges and uncertainties.</p> <p>The SER also notes that the licensee is responsible for ensuring that the procured services are within the accredited scope fo NVLAP and A2LA certificates.</p> <p>FPL QATR B.4 meets these bases.</p> <p>FPL meets all bases of the SER and therefore the SER is applicable.</p>
<p><b>B.4</b></p> <p>FPL commits to Position C.3.2 of Regulatory Guide 1.28, Revision 3, for auditing and evaluation of suppliers, with the exception that for position C.3.2.2, FPL will review the information described therein as it becomes available through its ongoing receipt inspection, operating experience, and supplier evaluation programs, in lieu of performing a specific evaluation on an annual basis. The results of the reviews are promptly considered for effect on a supplier's continued qualification and adjustments made as necessary (including corrective actions, adjustments of supplier audit plans, and input to third party auditing entities, as warranted). In addition, results are reviewed periodically to determine if, as a whole, they constitute a significant condition adverse to quality requiring additional action.</p>	<p>This exception was approved by 11/18/97 letter from J. Donohew of the NRC to J. Hagan of Entergy Operations, Inc.</p> <p>The basis for acceptance stated in the SER is that:</p> <p>A documented ongoing evaluation of the supplier is performed. Where applicable, this evaluation takes into account (1) review of supplier-furnished documents such as certificates of conformance, nonconformance notices, and corrective actions, (2) results of previous source verifications, audits, and receiving inspections, (3) operating experience of identical or similar products furnished by the same supplier, and (4) results of audits from other sources (e.g., customer, ASME, or NRC audits). The results of the evaluations are reviewed and appropriate corrective action taken. Adverse findings resulting from these evaluations are periodically reviewed in order to determine if, as a whole, they result in a significant condition adverse to quality and to provide input to support supplier audit activities conducted by the licensee or a third party auditing entity.</p> <p>The following additional sources of information are used in performing the ongoing evaluations.</p> <p>NUREG-0040, "Licensee Contractor and Vendor Inspection Status Report," issued quarterly by the NRC;</p> <p>notifications of supplier deficiencies from the sites via the Condition Reporting process;</p> <p>notifications of supplier-related industry events requiring action by Materials Requirements;</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
	<p>Nuclear Procurement Issues Committee's (NUPIC's) program for immediate notification of significant findings; the on-line NUPIC database; and Nuclear Network information.</p> <p>The basis is satisfied and the SER is applicable to FPL.</p> <p>This exception is taken in the current QA Program Description for Duane Arnold.</p>
<p><b>B.4</b></p> <p>Regulatory Guide 1.28, Revision 3, Regulatory Position C.3.2.1, requires that suppliers be audited triennially. FPL may apply a 90-day grace period to the requirement to audit suppliers on a triennial basis. When the grace period is applied, the next due date for the activity is based upon the original scheduled date. However, in all cases the periodicity shall not exceed three years plus 90 days.</p>	<p>By letter dated December 17, 1997, Rochester Gas &amp; Electric transmitted a proposed revision to the R. E. Ginna Nuclear Power Plant Quality Assurance Program for Station Operation.</p> <p>RG&amp;E proposed a 25% grace period not to exceed 90 days, be applied to frequencies for periodic activities described in the QAPSO and regulatory guides and standards listed in the QAPSO.</p> <p>In response to NRC request for additional information (RAI), RG&amp;E limited its request to the following specific activities:</p> <ul style="list-style-type: none"> <li>Internal Audits</li> <li>Supplier Audits</li> <li>Supplier Evaluations</li> <li>Annual Assessment of Lead Auditor Qualification</li> <li>Annual Evaluations of Inspection, Examination, and Testing Personnel</li> </ul> <p>This exception was approved via 7/22/1998 letter from G.S. Vissing of the NRC to Dr. R. Mecredy of Rochester Gas and Electric.</p> <p>The basis of approval was that for activities deferred in accordance with the 90-day "grace period", the next performance date for such activities will be based on their originally scheduled date, i.e., in all cases, the periodicity for these activities will not be allowed to exceed the original commitment plus 90 days.</p> <p>The basis is applicable to FPL and satisfied as follows:</p> <p>Triennial Supplier Audits is one of the periodic activities included within the scope of NRC approval.</p> <p>FPL commits that when the 90-day "grace period</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
	<p>is applied that the next performance date is based on the original scheduled date.</p> <p>FPL commits that in all cases the periodicity for the activity will not be allowed to exceed 90 days.</p> <p>This exception is included in the current QA Program Descriptions for St. Lucie, Turkey Point, and Seabrook.</p>
<p>B.7</p> <p>Subpart 2.2, Section 2.2 establishes criteria for classifying items into protection levels. Instead of classifying items into protection levels, FPL plants may establish controls for the packaging, shipping, handling and storage of such items on a case-by-case basis with due regard for the item's complexity, use, and sensitivity to damage. Prior to installation or use, the items are inspected and serviced as necessary to assure that no damage or deterioration exists which could affect their function.</p>	<p>This continues to meet 10 CFR 50 Appendix B in that adequate measures are established and implemented to control handling, shipping, storage, cleaning, and preservation of materials and equipment to prevent damage or deterioration.</p> <p>This exception is taken in the current QA Program Descriptions for St. Lucie, Turkey Point, and Duane Arnold.</p>
<p>B.7</p> <p>Subpart 2.2, Section 5.2.2 requires receiving inspections be performed in an area equivalent in environmental controls to those for the level of storage of the item. At FPL plants, receiving inspection area environmental controls may be less stringent than the storage environmental requirements for the item. Such inspections are performed in a manner and in an environment which does not endanger the required quality of the item.</p>	<p>This continues to meet 10 CFR 50 Appendix B in that receiving inspection is performed in an area with sufficient environment control to prevent damage or deterioration.</p> <p>This exception is taken in the current QA Program Description for Duane Arnold and Seabrook.</p>
<p>B.7</p> <p>Subpart 2.2, Section 6.2.4 states that the use or storage of food, drinks, and salt tablet dispensers in controlled storage areas shall not be permitted. FPL takes exception to the wording of Section 6.2.4 and substitutes an alternate requirement that the use or storage of food, drinks, and salt tablet dispensers in any storage area shall be controlled and be limited to designated areas where such use or storage is not deleterious to the stored items.</p>	<p>The purpose of the requirement is to assure that items in storage are protected against damage or deterioration. The alternate requirement that the use or storage of food, drinks, and salt tablet dispensers in any storage area shall be controlled and limited to designated areas where such use or storage is not deleterious to the stored items also adequately addresses this purpose.</p> <p>This alternate requirement continues to meet 10 CFR 50 Appendix B in that adequate measures are provided to prevent damage or deterioration of items in Storage.</p>
<p>B.7</p> <p>Subpart 2.2, Section 7.1 refers to Subpart 2.15 for</p>	<p>In updating commitments to NQA-1-1994, industry moved and expanded upon certain requirements</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
<p>requirements related to handling of items. The scope of Subpart 2.15 includes hoisting, rigging and transporting of items for nuclear power plants. This scope exceeds the scope of the NRC's original endorsement of ANSI N45.2.2 in Regulatory Guide 1.38, and establishes requirements for which there is no NRC regulatory position. In lieu of compliance with Subpart 2.15, FPL establishes and implements controls over hoisting, rigging and transport activities to the extent necessary to protect the integrity of the items involved, as well as potentially affected nearby structures and components. For re-rating of lifting equipment to allow "special lifts," FPL performs dynamic load testing over the full range of the lift using test loads at least 110% of the lift weight. Dynamic tests include raising, lowering, and traversing the load. Where required, FPL complies with applicable hoisting, rigging and transportation regulations and codes.</p>	<p>from the original ANSI N45.2.2, resulting in NQA-1-1994, Subpart 2.15. As noted, there is no currently applicable NRC guidance regarding the expanded requirements therein. Therefore, FPL proposes this alternative to Section 7.1 of Subpart 2.2, to establish adequate requirements to assure compliance with Criterion 13 of 10CFR50, Appendix B.</p> <p>This exception is taken in the current QA Program Description for Duane Arnold.</p>
<p>B.7</p> <p>Subpart 2.1, Sections 3.1 and 3.2 establish criteria for classifying items into cleanliness classes and requirements for each class. Instead of using the cleanliness level system of Subpart 2.1, FPL plants may establish cleanliness requirements on a case-by-case basis, consistent with the other provisions of Subpart 2.1. FPL establishes appropriate cleanliness controls for work on safety related equipment to minimize introduction of foreign material and maintain system/component cleanliness throughout maintenance or modification activities, including documented verification of absence of foreign materials prior to system closure.</p>	<p>This continues to meet 10 CFR 50 Appendix B in that adequate measures are established and implemented to control cleaning, and preservation of materials and equipment to prevent damage or deterioration.</p> <p>This exception is taken in the current QA Program description for Duane Arnold.</p>
<p>B.7</p> <p>Instead of the fire-level zone designation in Subpart 2.3, FPL bases its control over housekeeping activities on a consideration of what is necessary and appropriate for the activity involved. The controls are effected through procedures or instructions that, in the case of maintenance or modification work, are developed on a case-by-case basis. Factors considered in developing the procedures and instructions include cleanliness control, personnel safety, fire prevention and protection, radiation control and security. The procedures and instructions make use of standard janitorial and work practices to the extent possible.</p>	<p>This exception is taken in the current QAPDs for all FPL plants and, in accordance with the NRC Staff's review criteria no further explanation is required. NRC review criteria states "Current exceptions/alternatives that are already incorporated into existing facility QAPDs do not need to be explained."</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
<p><b>B.9</b></p> <p>Section 5.5 of IEEE 498-85 (NQA-1, Subpart 2.16) requires all M&amp;TE to be labeled. As stated above, FPL plants may not label certain M&amp;TE, such as installed instrumentation, but provide other means of identification so appropriate controls can be implemented. This exception also applies to Section 7.2.1 of IEEE 336-85 (NQA-1, Subpart 2.4).</p>	<p>This exception is taken in the current QAPDs for all FPL plants and, in accordance with the NRC Staff's review criteria no further explanation is required. NRC review criteria states "Current exceptions/alternatives that are already incorporated into existing facility QAPDs do not need to be explained."</p>
<p><b>B.15</b></p> <p>Supplement 17S-1, Section 4.2(b) requires records to be firmly attached in binders or placed in folders or envelopes for storage in steel file cabinets or on shelving in containers. For hard-copy records maintained by FPL plants, the records are suitably stored in steel file cabinets or on shelving in containers, except that methods other than binders, folders or envelopes may be used to organize the records for storage.</p>	<p>This exception is based on the 2005 NMC fleet QATR submittal; NMC based it on a previous Palisades exception. Nuclear Management Company used this exception to establish alternative standards for records storage. This exception is acceptable to FPL because it provides equivalent storage requirements to NQA-1-1994 and continues to meet the storage requirements of 10 CFR 50 Appendix B.</p> <p>This exception is taken in the current QA Program Descriptions for Duane Arnold and Seabrook.</p>
<p><b>B.16</b></p> <p>Section 2.3.a requires cleanliness during maintenance to be in accordance with Subpart 2.1. FPL commitment to Subpart 2.1 is described in section B.7.</p>	<p>See B.7 discussion regarding Subpart 2.1.</p> <p>This exception is taken in the current QA Program Description for Duane Arnold.</p>
<p><b>B.16</b></p> <p>Section 2.7 requires the application of Subparts 2.4, 2.5 and 2.8 for inspections of installation activities. FPL commitment to Subparts 2.5 and 2.8 is limited to activities comparable in nature and extent to those during original construction (see Section B.12). Inspections (verifications) of maintenance or modification activities are established, conducted and documented as required by Section B.12 to establish a suitable level of confidence in affected structures, systems, or components. The inspection criteria in Subparts 2.5 and 2.8 may be used in establishing required inspections for maintenance and minor modifications.</p>	<p>The limitations to use Subparts 2.5 and 2.8 in situations comparable to construction is consistent with the Regulatory Positions provided in Regulatory Guides 1.33 (2/78), and 1.116 (5/77) (for Subpart 2.8). The use of Subpart 2.5 for operations goes beyond the Regulatory Position of Regulatory Guide 1.94 (4/76). The FPL QATR has provisions sufficient to assure compliance to Criterion 10 of 10CFR50, Appendix B.</p> <p>This exception is taken in the current QA Program Descriptions for Duane Arnold.</p>
<p><b>C.3</b></p> <p>In the event the expert panel review process is not used to determine frequencies, the topics in Table 1 are audited as a minimum of biennially. A 90-day grace period may be applied to this periodicity. When the grace period is applied, the next due date for the activity is based upon the original scheduled</p>	<p>By letter dated December 17, 1997, Rochester Gas &amp; Electric transmitted a proposed revision to the R. E. Ginna Nuclear Power Plant Quality Assurance Program for Station Operation.</p> <p>RG&amp;E proposed a 25% grace period not to exceed 90 days, be applied to frequencies for periodic activities described in the QAPSO and</p>

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

QATR Exception	Source/Basis for Acceptance
<p>date. However, in all cases the periodicity shall not exceed two years year plus 90 days.</p>	<p>regulatory guides and standards listed in the QAPSO.</p> <p>In response to NRC request for additional information (RAI), RG&amp;E limited its request to the following specific activities:</p> <p>Internal Audits                      Supplier Audits                      Supplier Evaluations                      Annual Assessment of Lead Auditor Qualification                      Annual Evaluations of Inspection, Examination, and Testing Personnel</p> <p>This exception was approved via 7/22/1998 letter from G.S. Vissing of the NRC to Dr. R. Mecredy of Rochester Gas and Electric.</p> <p>The basis of approval was that for activities deferred in accordance with the 90-day "grace period", the next performance date for such activities will be based on their originally scheduled date, i.e., in all cases, the periodicity for these activities will not be allowed to exceed the original commitment plus 90 days.</p> <p>For Internal Audits the additional restriction that this grace period will not be applied to audits of the Nuclear Emergency Response Plan to satisfy the requirements of 10 CFR 50.54(t), and Station Security Plan to satisfy the requirements of 10 CFR 50.54(p)(3), 73.56(g)(1) and (g)(2) and 10 CFR 73.55(g)(4).</p> <p>The basis is applicable to FPL and satisfied as follows:</p> <p>Internal Audits is one of the periodic activities included within the scope of NRC approval.</p> <p>FPL commits that when the 90-day "grace period" is applied that the next performance date is based on the original scheduled date.</p> <p>FPL commits that in all cases the periodicity for the activity will not be allowed to exceed 90 days.</p> <p>FPL does not apply this grace period exception to audits of the Nuclear Emergency Response Plan to satisfy the requirements of 10 CFR 50.54(t), and Station Security Plan to satisfy the requirements of 10 CFR 50.54(p)(3), 73.56(g)(1) and (g)(2) and 10 CFR 73.55(g)(4). FPL only</p>

St. Lucie Units 1 and 2, Docket Nos. 50-335 and 50-389  
Turkey Point Units 3 and 4, Docket Nos. 50-250 and 50-251  
Seabrook Station, Docket No. 50-443  
Duane Arnold Energy Center, Docket No. 50-331  
L-2006-208, Attachment 4 (Enclosure (3) to L-2006-143) Page 15 of 15

**QATR Exceptions/Alternatives**

**To NQA-1-1994 Requirements and Related Regulatory Guide Regulatory Positions**

<b>QATR Exception</b>	<b>Source/Basis for Acceptance</b>
	applies this grace period to audit topics listed in Section C.3, Table 1.  This exception is included in the current QA Program Descriptions for St. Lucie, Turkey Point, and Seabrook.