

L-2021-115 10 CFR 50.54(a)(3) 10 CFR 50.55(f)(4)(i)

May 24, 2021

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

Re:

Florida Power & Light Company St. Lucie Units 1 and 2, Docket Nos. 50-335 and 50-389

Florida Power & Light Company Turkey Point Units 3 and 4, Docket Nos. 50-250 and 50-251

Florida Power & Light Company Turkey Point Units 6 and 7, Docket Nos. 52-040 and 52-041

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

NextEra Energy Point Beach, LLC Point Beach Units 1 and 2, Docket Nos. 50-266 and 50-301

NextEra Energy Quality Assurance Topical Report (FPL-1) Revision 26 Annual Submittal and Florida Power and Light Company Quality Assurance Program Description for 10 CFR Part 52 Licenses (FPL-2) Revision 10

References: Letter L-2020-100 from William L. Parks, Florida Power & Light, to USNRC, NextEra Energy Quality Assurance Topical Report (FPL-1) Revision 24 Annual Submittal, dated June 11, 2020.

Letter L-2020-086 from William Maher, Florida Power and Light Company, to USNRC, Florida Power and Light Company Quality Assurance Program Description for 10 CFR Part 52 Licenses (FPL-2) Revision 7, dated May 22, 2020.

Pursuant to 10 CFR 50.54(a)(3) and 10 CFR 50.55(f)(4)(i), attached are the annual updates for the Florida Power & Light Company (FPL); NextEra Energy Seabrook, LLC; NextEra Energy Duane Arnold, LLC; and NextEra Energy Point Beach, LLC Quality Assurance Topical Report (FPL-1) for 10 CFR Part 50 Licenses and Quality Assurance Program Description for 10 CFR Part 52 Licenses (FPL-2) for Turkey Point Units 6 and 7. This letter satisfies the 10 CFR 50.54(a)(3), and 50.55(f)(4)(i) requirements to provide the NRC with an update of changes to the quality assurance program descriptions that did not reduce commitments in the program description and, therefore, did not require NRC approval prior to implementation.

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Florida Power & Light Company

L-2021-115 10 CFR 50.54(a)(3) 10 CFR 50.55(f)(4)(i) Page 2 of 2

These Revisions are the current versions of FPL-1 and FPL-2 in use and became effective on May 13, 2021. Enclosure 1 of this letter provides a copy of Revision 26 of FPL-1 for information purposes only. Enclosure 2 of this letter provides a copy of Revision 10 of FPL-2 for information purposes only.

Should there be any questions or need for additional information, please contact me at (561) 803-7957.

Sincerely,

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Denio Timothy Lesniak

General Manager, Regulatory Affairs Florida Power & Light Company

Enclosures: 1. NextEra Energy QATR (FPL-1) Current Version (Revision 26) 2. Florida Power and Light (FPL-2) Current Version (Revision 10)

cc: Regional Administrator, Region I Regional Administrator, Region II Regional Administrator, Region III USNRC Project Manager, Turkey Point USNRC Project Manager, St. Lucie Senior Resident Inspector, USNRC, Turkey Point Senior Resident Inspector, USNRC, St. Lucie USNRC Project Manager, Seabrook Station Senior Resident Inspector, USNRC, Seabrook Station USNRC Project Manager, Point Beach Senior Resident Inspector, Point Beach

L-2021-115 10 CFR 50.54(a)(3) 10 CFR 50.55(f)(4)(i) Enclosure

ENCLOSURE 1 NextEra Energy QATR (FPL-1) (92 pages)



Florida Power and Light Company, NextEra[™] Energy Seabrook, LLC, and NextEra[™] Energy Point Beach, LLC

Quality Assurance Topical Report

FPL-1

POLICY STATEMENT

Florida Power and Light Company, NextEra Energy Seabrook, LLC, and NextEra Energy Point Beach, LLC (hereafter referred to collectively as NextEra Energy) 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 Quality Assurance Program (QAP) described herein and associated implementing documents provide for control of 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 our 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 QAP.

Responsibility for developing, implementing, and verifying execution of the Quality Assurance Program is delegated to the Chief Nuclear Officer and authority for developing and verifying execution of the program to the Director Nuclear Assurance and Assessment.

Approved By: **Richard Baird Director Nuclear Assurance & Assessment** 5/13/21 Date D. Moul Executive Vice President and Chief Nuclear Officer 5/20/21 Date

TABLE OF CONTENTS

POLICY STATEMENT			
TABLE OF CONTENTS			
INTRODUCTION			
A. MAI	A. MANAGEMENT		
A.1	Methodology	6	
A.2	Organization	8	
A.3	Responsibility	15	
A.4	Authority	16	
A.5	Personnel Training and Qualification	16	
A.6	Corrective Action	18	
A .7	Regulatory Commitments	19	
B. PERFORMANCE/VERIFICATION		27	
B.1	Methodology	27	
B.2	Design Control	27	
B.3	Design Verification	28	
В.4	Procurement Control	28	
B.5	Procurement Verification	33	
B.6	Identification and Control of Items	33	
B.7	Handling, Storage and Shipping	34	
B.8	Test Control	36	
B.9	Measuring and Test Equipment Control	36	
B.10	Inspection, Test and Operating Status	37	
B.11	Special Process Control	38	
B.12	Inspection	38	
B.13	Corrective Action	39	
B.14	Document Control	39	
B.15	Records	41	
B.16	Plant Maintenance	42	
B.17	Computer Software Control	42	
C. ASSESSMENT		43	
C.1	Methodology	43	
C.2	Self-Assessment	43	
C.3	Independent Assessment	44	
APPEN	APPENDICES		
Appendix A: On-Site Review Group		47	
Appendix B: Procedures		50	
Appendix C: Definitions		54	
Appendix D: Revision Summaries		58	
Appendix E: Organization Charts		91	

The following pages have been affected in Revision 26: 10, 11, 12, 30, 31, 32, 33, 46, 47, 50, 87, 88, 89, 90, 91, 92

INTRODUCTION

The 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 Policy with regard to Quality Assurance. This Program shall apply to Florida Power & Light's St. Lucie Nuclear Plant, Turkey Point Nuclear Plant, and NextEra Energy's Seabrook Station, and Point Beach Nuclear Plant and shall be implemented at each plant site throughout the operating life of these nuclear plants.

The requirements of the Quality Assurance Program shall apply to nuclear safety related structures, systems, and components as identified in the Safety Analysis Report or Q-List for each nuclear unit. Additionally, the requirements of the Quality Assurance Program shall apply to all NextEra Energy, contractor, or consultant organizations performing activities affecting the quality of safety related structures, systems, and components of the nuclear power plants. Portions of the Quality Assurance Program requirements are also applicable to quality related items and services and non-safety related structures and components subject to an Aging Management Program (AMP) for license renewal. Those portions applicable to specific quality related items or services and non-safety related structures and components subject to an Aging Management Program (AMP) for license renewal 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). This approach was chosen because it best represents the commitment to the philosophy that each individual, properly trained and motivated, achieves the highest quality of performance of which they are capable. In addition, this emphasis is used 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.

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 NextEra Energy. The following requirements apply to all organizations and positions that manage and perform activities within NextEra Energy's scope. The organization is committed to implementing these requirements. Personnel engaged in supporting nuclear generation shall comply with the requirements of the Quality Assurance Program (QAP) described in this QATR. Contractors, or other supporting organizations, 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 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 the operating philosophy, rules of practice are established 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.

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.

A.1 Methodology (Continued)

It is NextEra Energy'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, selected elements of the Quality Assurance Program are applied 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, NextEra Energy commits to compliance with ASME NQA-1, 1994, Basic Requirement 2. QATR revisions are reviewed by senior management and approved by the Director Nuclear Assurance & Assessment and the Chief Nuclear Officer. Changes to this QATR will be governed by and made in compliance with 10CFR50.54(a).

In establishing procedural controls, NextEra Energy 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, NextEra Energy 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 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. Appendix E contains organization charts depicting the organizational relationships for key management and functional groups both corporate and on-site. 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 has overall responsibility for 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 NextEra Energy the responsibility for the program effectiveness and the work is retained by NextEra Energy, 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 management oversight is established.
- Performance of delegated work is formally evaluated by NextEra Energy.

A.2 Organization (Continued)

In establishing its organizational structure, NextEra Energy 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 NextEra Energy 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 corporate policy through the Company's senior management staff. Responsibility for implementing the Quality Assurance Program is delegated to the Chief Nuclear Officer and authority for developing and verifying execution of the program is delegated to the Director Nuclear Assurance and Assessment.

A.2.1.2 Executive Vice President and Chief Nuclear Officer (CNO)

This position reports to the NextEra Energy Chairman and Chief Executive Officer (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 ensuring that defects and non-compliances are reported to the NRC as required by 10CFR21.

A.2 Organization (Continued)

A.2.1.2.a Vice President Nuclear

This position reports to the CNO and is responsible for governance and oversight of the following:

- Performance Improvement
- Security
- Fleet Training
- Licensing
- Interface with Nuclear Information Technology
- Continuous Improvement Program
- Fleet Projects (including capital projects, project control, project implementation, and ISFSI)
- Development and implementation of the programs associated with regulatory driven projects across the fleet.
- Outages
- Fleet Engineering Support
- Safety Assurance
- Fuels
- Center for Work Excellence
- Organizational Effectiveness and Learning

A.2.1.2.b Sr. Director Nuclear Fleet Finance

This position reports to the CNO and is responsible for the following:

- Nuclear fleet budgets
- Spending authorization
- Key performance indicators

A.2.1.2.c General Manager Fleet Engineering

The General Manager Fleet Engineering reports to the Vice President Nuclear and is responsible for:

- Fleet Engineering
 - Engineering Technical Governance and Oversight
 - Engineering Programs Governance and Oversight
 - Nuclear Fuels
 - Engineering Capital Group

A.2 Organization (Continued)

A.2.1.2.d Sr. Director Fleet Projects and Construction

The Sr. Director Fleet Projects and Construction reports to the Vice President Nuclear and is responsible for the Engineering Construction Alliance interface including project controls implementation and engineering.

A.2.1.2.e Safety Assurance General Manager

This position reports to the Vice President Nuclear and will oversee regulatory affairs, emergency preparedness, access / fitness for duty, , and probabilistic risk assessment.

A.2.1.2.f Organizational Effectiveness and Learning General Manager

This position reports to the Vice President of Nuclear and will oversee training & accreditation, Performance Improvement and Organizational Effectiveness.

A.2.1.2.g Director Nuclear Assurance & Assessment

This position reports to and has direct access to the CNO for resolution of any areas in question. This position is responsible for the following:

- Activities that include establishing, maintaining, and interpreting quality assurance practices and policies (including this QATR)
- Managing independent assessment (Quality Assurance {QA})
- Facilitating actions deemed necessary to prevent unsafe plant conditions or a significant violation of the QAP; including Stop Work authority at the sites and corporate offices
- Periodically apprising the CNO of the status of the quality assurance program at NextEra Energy facilities and immediately apprising senior management of significant problems affecting quality; and verifying implementation of solutions for significant conditions adverse to quality identified by Nuclear Assurance and Assessment.
- Establishing the requirements for assessor and inspector certification; and providing for supplier evaluation
- Conduct of supplier assessments or surveys; and verification that supplier quality assurance programs comply with NextEra Energy requirements

A.2 Organization (Continued)

A.2.1.2.h Vice President Integrated Supply Chain (ISC)

This position reports to the CEO through the Executive Vice President Engineering, Construction and ISC and is responsible through ISC directors for the following:

- Procurement engineering
- Coordinating contract activities
- Negotiating, generating, and issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection at the nuclear plants, and for materials and equipment to support the Nuclear Division staff
- 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
- Controlling materials received at each nuclear plant site in accordance with company policy and procedures

A.2.1.2.i Senior Director, IT Nuclear

This position reports to the Nuclear Executive Vice President Finance and CFO through the Vice President & CIO and is responsible for the following:

- Nuclear information technology such as computer-related hardware and software acquisition, deployment, maintenance, control and replacement; telecommunications
- Information / cyber security; and applicable training
- Interface with the Vice President Corporate Support for cyber security
- Management of information technology
- Nuclear cyber security
- Computer-related hardware/software acquisition
- The functions are supported via staff at both corporate and site levels

A.2 Organization (Continued)

A.2.2 Site Organization

The following site 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.a Site Vice Presidents

These positions report to the CNO and are responsible for the safe operation of the nuclear plant. The Site Vice Presidents have control of the onsite resources necessary for the safe operation and maintenance regardless of organizational reporting.

In this position, the Site Vice Presidents assure 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), radiation protection, operations and support, engineering, maintenance and work control, security, safety, and related procedures and programs. The Onsite Review Group serves the Site Vice Presidents in a technical capacity and provides review of plant safety and performance (see Appendix A).

A.2.2.1.b Engineering Site Director

This position reports to the Site Vice President. 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, system engineering, system testing, and technical support.

This position is also responsible for NUREG-0737, Action Plan Item I.B.1.2 technical review functions that St. Lucie Unit 2 and Seabrook Station are committed to and implement by system health monitoring, development of a quarterly system health report which provides system performance and status to senior management, and development and implementation of the Maintenance Rule Program.

A.2.2.1.c Safety Assurance and Learning Station Director

This position reports to the Site Vice President and oversees training and accreditation, regulatory affairs, emergency preparedness, safety and Security.

A.2.2.1.d Licensing Manager

This position reports to the Safety Assurance and Learning Station Director and is responsible for site regulatory interfaces and functionally interfaces with the fleet Licensing Director.

A.2 Organization (Continued)

A.2.2.1.e Training Site Manager

This position reports to the Safety Assurance and Learning Station Director and is responsible for training. The Site 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.

This position is also responsible for NUREG-0737, Action Plan Item I.B.1.2 technical review functions that St. Lucie Unit 2 and Seabrook Station are committed to regarding the oversight, implementation, and coordination of internal and external operating experience.

A.2.2.1.f Emergency Preparedness Manager

This position reports to the Licensing Manager and functionally interfaces with the Manager of Emergency Preparedness (offsite) and is responsible for maintaining and implementing the emergency plan for the station.

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

A.2.2.2.a Project Site Manager

This position reports to the Sr. Director Projects and Construction with direct interface with the Site Vice Presidents and is responsible for installing plant modifications as a result of design changes and implementing other major projects.

A.2.2.2.b Nuclear Assurance Manager

This position reports to the Director Nuclear Assurance & Assessment (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.3 Responsibility

NextEra Energy 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.

NextEra Energy 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, Nuclear 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.

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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 1 and Supplement 1S-1.

A.4 Authority

When responsibility is delegated for planning, establishing, or implementing any part of the overall QAP, sufficient authority to accomplish the assigned responsibilities is delegated. Regardless of delegation, NextEra Energy 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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 1 and Supplement 1S-1.

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, formal indoctrination and training programs are established and maintained 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 Technical 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 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, NextEra Energy 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

Revision 26

A.5 Personnel Training and Qualification (Continued)

- 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.
- At all NextEra Energy plants except Point Beach, 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 Non-mandatory Appendix 2A-1, NextEra Energy Point Beach does not establish levels of qualification/ certification for inspection personnel. Instead, NextEra Energy Point Beach 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.
- In lieu of Supplement 2S-2, NextEra Energy 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 NextEra Energy 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 NextEra Energy 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. The demonstration process for prospective lead auditors is described in written procedures.
- For Supplement 2S-3: A 90-day grace period may be applied 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 exceed15 months.

Revision 26

A.6 Corrective Action

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.

A corrective action program is implemented 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 responsible management.

Nonconforming items are reviewed and accepted, rejected, repaired, or reworked, and are identified and controlled to prevent their inadvertent test, installation or use. Nonconforming items may be conditionally released for installation, test, energization, pressurization, or use if the conditional release will not adversely affect nor preclude identification and correction of the nonconformance. Disposition of conditionally released items are resolved before the items are relied upon to perform their safety-related functions. Conditional release evaluations are documented, reviewed, and approved prior to implementation.

In establishing requirements for corrective action, NextEra Energy 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, NextEra Energy 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 or 1967 Proposed Draft General Design Criterion I (for Point Beach and Turkey Point)
- 10CFR50.55a, "Codes and Standards"
- 10 CFR 73, "Physical Protection of Plants and Materials"

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

NextEra Energy also is committed to carrying out the provisions of certain nuclear quality assurance industry standards, other than ASME NQA-1. The extent of the 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"

 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.

- 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 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) - For all NextEra Energy plants except Point Beach, NextEra Energy 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. Point Beach does not commit to compliance with position C.1 of this Regulatory Guide: instead of establishing three levels of gualification provided in Non-mandatory Appendix 2A-1, NextEra Energy Point Beach 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. See the specific exceptions to 2S-1 and 2A-1 contained in Section A.5 of this QATR. NextEra Energy 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, the information described therein will be reviewed 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, independent assessment frequencies as described in Section C of this QATR are established. In lieu of NQA-1 1983a, NQA-1 1994 is used.
- Safety/Regulatory Guide 1.29, Revision (site specific) "Seismic Design Classification" Some 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 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 1.30, August 1972, "Quality Assurance Requirements for the Installation, Inspection and Testing of Instrumentation and Electric Equipment," (ANSI N45.2.4-1972/IEEE 336-1971) – NQA-1 1994, Subpart 2.4/IEEE 336-1985 is substituted 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 NextEra Energy has included in this QATR the remaining "administrative controls" elements from N-18.7 (1976). Therefore, NextEra Energy does not commit to compliance with the requirements of ANSI N-18.7. As recommended by Regulatory Position C.1, Appendix A of RG 1.33 is used 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. NextEra Energy meets the guidance in Regulatory Position C.3 in that proposed changes to technical specifications or license amendments are reviewed by the independent review body, ORG, prior to submittal to the Commission for approval. In lieu of compliance with Regulatory Position C.4, assessment topics and frequencies are established as described in Section C.3 of this QATR. In lieu of compliance with Regulatory Position C.5. appropriate equivalent requirements have been established within this QATR.
- Regulatory Guide 1.36, Revision 0, February 1973, "Nonmetallic Thermal Insulation for Austenitic Stainless Steel" – Some of the current 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.

- 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) NQA-1 1994, Subpart 2.1 is substituted 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) - NQA-1 1994, Subpart 2.2 is substituted 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. NextEra Energy 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. NextEra Energy 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. NextEra Energy 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.

- Regulatory Guide 1.39, Revision 2, September 1977, "Housekeeping Requirements for Water-Cooled Nuclear Power Plants," (ANSI N45.2.3-1973) – NQA-1 1994, Subpart 2.3 is substituted 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 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 site.
- Regulatory Guide 1.94, Revision 1, April 1976, "Quality Assurance Reguirements for Installation, Inspection, and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants," (ANSI N45.2.5-1974) - NQA-1 1994, Subpart 2.5 is substituted 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, NextEra Energy 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.

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) – NQA-1 1994, Subpart 2.8 is substituted 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 NextEra Energy 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. NextEra Energy 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) The intent of the quality assurance guidance cited in Position C.7 is met. 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 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) -Quality Assurance guidance cited in Position C.3.5, Appendix A is met. 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.
- Regulatory Guide 1.164, Revision 0, June 2017, "DEDICATION OF COMMERCIAL-GRADE ITEMS FOR USE IN NUCLEAR POWER PLANTS" - Regulatory Guide 1.164 endorses, in part, the Electric Power Research Institute (EPRI) 3002002982, Revision 1 to EPRI NP-5652 and TR-102260, "Plant Engineering: Guideline for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related Applications", with respect to acceptance of commercial-grade items and services to be used as basic components for nuclear power plants. NextEra Energy commits to utilizing the EPRI Guidance 3002002982, as endorsed in part by this Regulatory Guide 1.164, as a basis for our acceptance of commercial grade items to be used in Nuclear Safety-Related applications. Utilizing Regulatory Guide 1.164 and EPRI 3002002982 Guidance, subject to the exceptions or clarifications provided in the Regulatory Guide 1.164, will provide adequate basis for performing dedication as defined in 10 CFR Part 21, and fulfillment of our quality assurance requirement of Procurement Control.

Revision 26

May 13, 2021

5

- Branch Technical Position CMEB 9.5-1, Revision 2, July 1981 (Positions C.2 and C.4) –
 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.
- For plants with an NFPA 805 fire protection licensing bases, NextEra Energy commits to implement Regulatory Guide 1.205, December 2009, "Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants," which endorses in part, NEI 04-02, Revision 2, Nuclear Energy Institute Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program under 10 CFR 50.48(c). The implementation of these documents is described in the station specific Technical Specifications and License Conditions and station specific NRC approved Safety Evaluation Reports.
- Regulatory Guide 4.15, Revision 1, February 1979, "Quality Assurance for Radiological Monitoring Programs (Normal Operations) – Effluent Streams and the Environment" – The intent of Regulatory Guide 4.15 is met.
- Regulatory Guide 7.10, Revision 2, March 2005, "Establishing Quality Assurance Programs for Packaging Used in the Transport of Radioactive Material" NextEra Energy 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" – NextEra Energy 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 electronic media storage is chosen as a means of maintaining required records, NextEra Energy will comply with the guidance of this Regulatory Issue Summary.
- Confirmatory Order Number EA-08-172, Section V.c., states, "FPL will create a fleet security organization to provide management oversight related corrective actions and enhancements to improve the thoroughness of searches at the St. Lucie Plant and other fleet-wide facilities.

A.7 Regulatory Commitments (Continued)

 NextEra nuclear plants with a renewed Facility Operating License are committed to satisfy the intent of NUREG-1800, Branch Technical Position IQMB-I, "Quality Assurance for Aging Management Programs," and/or NUREG-1801 elements. The 10 CFR Part 50, Appendix B quality assurance program provides for corrective actions, the confirmation process, and administrative controls for Aging Management Programs (AMP) for license renewal. The scope of this existing QA program is expanded to include non-safety-related structures and components that are subject to an Aging Management Review (AMR) for license renewal.

B. PERFORMANCE/VERIFICATION

B.1 Methodology

Personnel who work directly or indirectly for NextEra Energy 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. 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

A program has been established and implemented 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.

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 design organization.

Records are maintained 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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 3, and Supplement 3S-1, Sections 1, 2, 3, 5, 6, and 7.

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

B.3 Design Verification

The 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.

Design verification activities are completed 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.

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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 3, and Supplement 3S-1, Section 4.

B.4 Procurement Control

Controls are established and implemented 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.

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

B.4 Procurement Control

- 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 gualification whenever appropriate. In addition, NextEra Energy commits to Position C.3.2 of Regulatory Guide 1.28, Revision 3, for auditing and evaluation of suppliers, with an option to take exception for position C.3.2.2, where the information described therein is reviewed 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. 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 NextEra Energy plants are not required to be evaluated or audited. A grace period of 25 percent of the audit interval may be applied 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 45 months and not exceed 3.25 times the specified interval for any three consecutive inspections or audits.
- 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.

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

B.4 Procurement Control

In establishing controls for procurement, NextEra Energy 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 2.2 (which requires procurement documents to provide for identification of test, inspection, and acceptance requirements of the Purchaser for monitoring and evaluating the suppliers performance), and Supplement 7S-1, Section 5, for suppliers of commercial-grade calibration services with accreditation by a nationallyrecognized accrediting body, a documented review of the supplier's accreditation may be used in lieu of inspection or tests following delivery or in-process surveillances during performance of the service. This review shall include, at a minimum, all of the following:
 - 1. The accreditation encompasses ANSI/ISO/IEC 17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories".
 - 2. The accreditation body is recognized by the ILAC (International Laboratory Accreditation Cooperation) via a MRA (Mutual Recognition Agreement).
 - 3. The published scope of the accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
 - 4. For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
 - 5. The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.
- For Supplement 4S-1, Section 2.3 (which requires procurement documents to require a quality program that complies with NQA-1), when purchasing commercial-grade calibration/testing services from laboratories accredited by a domestic or international calibration and testing laboratory accredited by an ILAC MRA signatory, the accreditation process may be used in lieu of performing a commercial grade survey as part of the commercial grade dedication process. In such cases, accreditation may be accepted in lieu of imposing a QA Program consistent with NQA-1-1994, provided all the following are met:
 - 1) A review of the Supplier Accreditation is performed and includes verification of the following:
 - (a) The accreditation is to ANSI/ISO/IEC 17025:2017, "General Requirements for the Competence of Testing and Calibration Laboratories."

B. PERFORMANCE/VERIFICATION (Continued)

B.4 Procurement Control

- (b) The accrediting body is recognized by the ILAC (International Laboratory Accreditation Cooperation) via a MRA (Mutual Recognition Agreement).
- (c) For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
- (d) For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
- (e) The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.
- 2) Purchase order documents shall require:
 - (a) The service must be provided in accordance with the supplier's accredited ISO/IEC 17025:2017 program and scope of accreditation.
 - (b) As-Found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).
 - (c) Equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).
 - (d) Subcontracting of these accredited services is prohibited.
 - (e) The calibration/testing laboratory to notify NEE of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.
 - (f) Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.
 - (g) Any additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.
- 3) The receipt inspection shall validate the laboratory's document/certificate that:
 - (a) Certification that the calibration or test service has been performed in accordance with the ISO/IEC 17025:2017 program and that the test/calibration has been performed within their scope of accreditation and all purchase order requirements have been met.

B. PERFORMANCE/VERIFICATION (Continued)

B.4 Procurement Control

- For Supplement 4S-1, Section 2.3, which requires procurement documents to require a quality program that complies with NQA-1, other nationally recognized and NRC endorsed quality standards, such as N45.2, may be applied 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, the guidance contained in EPRI 3002002982 and Regulatory Guide 1.164 to procure Commercial Grade Items will be used in lieu of these requirements.
- The methodology for use of accreditation in lieu of commercial grade surveys for laboratory calibration and test services is defined in the Nuclear Energy Institute document NEI 14-05A, Revision 1, "Guidelines for the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services."
 - The use of this process was approved for licensees in NRC Safety Evaluation Report (SER) dated April 1, 2016 to Union Electric Company, Callaway Plant acknowledging the process as acceptable for use by all holders of operation license under Title 10 of the Code of Federal Regulation (10 CFR) Part 50. (ADAMS Accession Number ML16089A167) and requirements for applying this methodology are defined in RIS 2016-01.
 - The NRC SER dated February 19, 2021 concluded that NEI 14.05a, Revision 1 continues to provide an acceptable approach for licensees and suppliers subject to the QA requirements of Appendix B to 10 CFR Part 50 for using laboratory accreditation by ABs that are signatories to the ILAC MRA in lieu of performing commercial-grade surveys as part of the commercial-grade dedication process for procurement of calibration and testing services performed by domestic and international laboratories accredited by signatories to the ILAC MRA. (ADAMS Accession Number ML20322A019)
- For commercial grade calibration services from a supplier that has been accredited by a
 nationally recognized accrediting body (NVLAP or other accrediting body recognized by
 ILAC via a Mutual Recognition Agreement {MRA}), the service may be accepted subject
 to the restrictions noted in Section B.4 above instead of Supplement 4S-1 and Supplement
 7S-1.

Revision 26

B. PERFORMANCE/VERIFICATION (Continued)

B.5 Procurement Verification

Measures are established and implemented 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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 7 and Supplement 7S-1.

B.6 Identification and Control of Items

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Provisions are established and implemented 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.

In establishing provisions for identification and control of items, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 8 and Supplement 8S-1.
B. **PERFORMANCE/VERIFICATION (Continued)**

B.7 Handling, Storage and Shipping

Provisions are established and implemented 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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 13 and Supplement 13S-1. NextEra Energy 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, 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 NextEra Energy 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. Exception is taken to the wording of Section 6.2.4 and an alternate requirement substituted 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.
- Subpart 2.2, Section 6.4.2 states that care of items in storage shall be exercised in accordance with the following: (h) Other maintenance requirements specified by the manufacturer's instructions shall be performed. Exception is taken to the wording of Section 6.4.2 (h) and an alternate requirement substituted that "Care of items in storage shall be exercised in accordance with the following: Types of components that could require maintenance while in storage shall be identified and evaluated for specific maintenance requirements. Maintenance activities in Section 6.4.2 (h), listed in this requirement shall be considered during this evaluation and any deviations shall be documented."

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

B.7 Handling, Storage and Shipping

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, Controls are established and implemented 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," NextEra Energy 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, NextEra Energy 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 cleanness 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, NextEra Energy 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 cleanness classes and requirements for each class. Instead of using the cleanness level system of Subpart 2.1, plants may establish cleanness requirements on a case-by-case basis, consistent with the other provisions of Subpart 2.1. Appropriate cleanliness controls are established 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.

B. PERFORMANCE/VERIFICATION (Continued)

B.7 Handling, Storage and Shipping

 Instead of the five-level zone designation in Subpart 2.3, control over housekeeping activities is based 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.

B.8 Test Control

Testing programs are established and implemented 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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 11 and Supplement 11S-1.

B.9 Measuring and Test Equipment Control

Provisions are established and implemented 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.

Revision 26

36 of 92

B. PERFORMANCE/VERIFICATION (Continued)

B.9 Measuring and Test Equipment Control

- 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.
- 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, NextEra Energy 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, 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

Measures are established and implemented 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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 14.

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

B.11 Special Process Control

Provisions are established and implemented 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, NextEra Energy 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

Provisions are established and implemented 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, NextEra Energy 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, NextEra Energy commits to compliance with the requirements of Subparts 2.5 and 2.8 for establishing appropriate inspection requirements.

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

B.13 Corrective Action

Provisions are established and implemented 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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirements 15 and 16, and Supplement 15S-1.

B.14 Document Control

Provisions are established and implemented 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 power plant activities (see Appendix B) are reviewed by qualified persons, other than the preparer, as designated by the Site Vice Presidents. Such procedure reviews include a determination whether additional cross-discipline reviews are required and whether a Plant Technical Specification change or other NRC approval is required. Only safety related procedures and procedures important to safety as used in 10CFR71 and 72 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.

Revision 26

i

May 13, 2021

B. PERFORMANCE/VERIFICATION (Continued)

B.14 Document Control

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. Programmatic procedure preparation, review and usage controls are established 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.

The Site Vice Presidents may designate specific procedures or classes of procedures in writing to be reviewed by qualified reviewers in lieu of review by the ORG. Review by qualified reviewers shall be in accordance with implementing procedures. In addition, 10 CFR 50.59 and/or 10 CFR 72.48 reviews are performed on designated procedures, including subsequent changes, to determine if NRC review and approval is required prior to implementing the procedures/changes.

Procedures required by Technical Specifications shall be approved by the Site Vice Presidents or by cognizant managers or other supervisory personnel prior to implementation as specified by administrative requirements. The approval authority for specific procedures or classes of procedures shall be designated in writing by the Site Vice Presidents.

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, NextEra Energy commits to compliance with NQA-1, 1994, Basic Requirement 6 and Supplement 6S-1.

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

B.15 Records

Provisions are established and implemented 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. In establishing measures for the retention of security records, NextEra Energy commits to compliance with NQA-1 1994, Basic Requirement 17 and Supplement 17S-1, as well as the applicable portions of 10 CFR 73 established via 10 CFR 73.55 (q) and 10 CFR 73.70.

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), are used 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. Appropriate retention times are established 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. 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 addition, when using optical or electronic records storage and retrieval systems, NextEra Energy complies with NRC guidance in RIS 2000-18 with the following exception: -Attachment 1 to RIS 2000-18 states that the 1988 versions of the NIRMA Technical Guidelines, TG-11, TG15, TG-16, AND TG-21, when implemented together, provide an acceptable basis for complying with the record keeping requirements of 10 CFR Part 31, Part 32, Part 34, Part 40, Appendix B to 10 CFR Part 50, Part 60, Part 70, Part 71, Part 72, or Part 76. For the management of electronic records as outlined in these guidelines, NextEra Energy complies with the 2011 versions.

In establishing provisions for records, NextEra Energy 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 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.

Revision 26

B. PERFORMANCE/VERIFICATION (Continued)

B.16 Plant Maintenance

Controls are established 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.

In establishing controls for plant maintenance, NextEra Energy commits to compliance with NQA-1, 1994, Subparts 2.16 and 2.18, with the following exceptions:

- Section 5.5 of IEEE 498-85 (NQA-1, Subpart 2.16) requires all M&TE to be labeled. As stated in QATR Section B.9, plants may not label certain 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).
- Subpart 2.18, Section 2.3.a requires cleanliness during maintenance to be in accordance with Subpart 2.1. Commitment to Subpart 2.1 is described in Section B.7.
- Subpart 2.18, Section 2.7 requires the application of Subparts 2.4, 2.5 and 2.8 for inspections of installation activities. 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

Provisions are established and implemented 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, NextEra Energy commits to compliance with the requirements of NQA-1 1994, Supplement 11S-2 and Subpart 2.7 to establish the appropriate provisions.

C. ASSESSMENT

C.1 Methodology

Programs are established 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.

Self-assessment is used (performed by or for the group responsible for the activity being assessed) and independent assessment (performed by the Nuclear 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.

The 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.

Independent reviews are periodically performed of matters involving the safe operation of the 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, NextEra Energy 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 may be used interchangeably.

C.2 Self-Assessment

Self-assessments performed by or for the group responsible for the activity being assessed are used 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.

Revision 26

May 13, 2021

C. ASSESSMENT (Continued)

C.3 Independent Assessment

A program of planned and periodic performance-based independent assessments has been established 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 (Nuclear 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. 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, review by a designated management representative, or review by a designated management review body.

The independent triennial 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.

An independent biennial assessment includes an 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. Nuclear 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 Nuclear Assurance management and by management having responsibility for the area assessed. In addition, Nuclear Assurance activities are periodically assessed for effectiveness. Results are documented and reported to responsible management.

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

Independent Assessments are performed on a fixed frequency.

Independent Assessments of the topics in Table 1 are audited at least triennially. A grace period of 25 percent of the audit interval may be applied to these non-regulatory topics in executing 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 45 months. Certain activities, as identified in Table 2 (Regulatory Topics), receive independent assessments at frequencies established by related NRC rules. A grace period shall not be applied to these regulatory topics unless permitted by the NRC rule.

C.3 Independent Assessment (Continued)

An evaluation will be performed once per calendar year to determine the need for additional audit activities. When determined necessary, an additional audit activity will be performed within a timeframe established by the evaluation.

C. ASSESSMENT (Continued)

C.3 Independent Assessment

Table 1

Topics Subject to Independent Assessment with QATR Defined Frequency

Topic ¹
Chemistry, Effluents & Environmental Monitoring
Engineering
Maintenance / Work Management
Nuclear Assurance
Operations
Performance Improvement
Procurement & Nuclear Materials Management
QA Programs
Radiological Protection & Radwaste
Training

Table 2

Topics Subject to Independent Assessment with Regulatory Defined Frequency

Topic ¹
Cyber Security
Emergency Planning
Fire Protection
Fitness For Duty and Access Authorization
Independent Spent Fuel Storage
Security

1. Topic titles in these tables may vary; however, all program elements (i.e. applicable regulatory requirements and all 10 CFR 50 Appendix B criteria) will be covered as identified in implementing procedures.

Revision 26

APPENDICES

Appendix A: On-Site Review Group

1.0 General

The On-Site Review Group (ORG) is responsible to the Site Vice Presidents 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 independent 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 Site Vice Presidents 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 Site Vice Presidents 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.

Appendix A: On-Site Review Group (Continued)

4.0 Review

The ORG reviews at least the following:

- (1) Changes to the Offsite Dose Calculation Manual (ODCM) 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, license requirements or of internal documents having nuclear safety significance.
- (7) Reports of special reviews and investigations as requested by the Site Vice Presidents.
- (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 Presidents, 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)

Appendix A: On-Site Review Group (Continued)

4.0 Review

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 Site Vice Presidents approval or disapproval of items reviewed.
- Renders determinations in writing with regards to whether Items (1) through (4), or changes thereto, require prior NRC approval in accordance with 10CFR50.59/72.48.
- Provides written notification to level(s) above the Site Vice Presidents of any disagreements between the ORG and the Site Vice Presidents.

The ORG shall advise the Site Vice Presidents 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 Site Vice Presidents, and to other management responsible for the areas reviewed as necessary. ORG records are retained according to Section B.15.

Appendix B: Procedures

Procedures are used to provide an approved, preplanned method of conducting activities affecting safety. As stated in Position C.1 of Regulatory Guide 1.33, Revision 2, NextEra Energy 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; 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.

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. Sufficent 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.

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 steadystate 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 shortor 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.

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 saftey 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

The definitions of terms as provided in Section 4 of the Introduction of NQA-1 1994 are used 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.

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 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.

Appendix C: Definitions (Continued)

- 2. Fire protection equipment, systems and features:
 - (a) that minimize the adverse effects of fires on safety related and the quality related structures, systems and components identified in this definition, and
 - (b) whose failure or inadvertent operation could significantly impair the safety function of structures, systems and components, and
 - (c) that is required for 10 CFR 50 Appendix R compliance (10 CFR 50 Appendix R licensed plants only), or
 - (d) that is required for compliance with the nuclear safety goal and radioactive release goal of NFPA 805 (NFPA 805 license plants only).

The above definition addresses the minimum scope of Fire Protection Equipment that is classified as Quality Related. Site specific definitions and/or commitments take precedence, if more restrictive.

- 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.
- 7. Instrumentation used in post accident monitoring and classified as Category 3 in response to the requirements of Regulatory Guide 1.97. (Some Category 2 instruments may also be classified as Quality Related.)
- 8. Items or services that are subject to unique quality assurance requirements due to specific NRC imposed regulatory requirements.

Appendix C: Definitions (Continued)

Review: A deliberately critical examination, including observation of plant operation, evaluation of assessment results, procedures, certain comtemplated 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.

Appendix D: Revision Summaries

Revision 0, 01/19/07		
Change/Reason for Change	Basis for Meeting 10CFR50	
New Program	NRC SE dated December 29, 2006	
	Subsequent organizational change, which added the Chief Operating Officer (COO), was reviewed in accordance with 10 CFR50.54(a) and determined not to constitute a reduction in commitment.	

	Revision 1, 02/11/08		
	Change/Reason for Change		
•	Organizational changes and editorial corrections	Organizational changes and editorial corrections were reviewed in	
•	Add ISFSI as required assessment topics	accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. Assessment topic added is in accordance with 10 CFR 72, SubpartG.	
•	Site Security assessment topic was clarified to indicate that it includes safeguards contingency plans	Assessment of safeguards contingency plans is in accordance with 10 CFR 50.54(P)	

Revision 2, 06/20/08		
Change/Reason for Change	Basis for Meeting 10CFR50	
 Add NextEra Energy Point Beach, LLC to the scope of FPL-1 The scope of the Engineering and Configuration Management assessment topic was clarified to indicate that it includes determination of QAP applicability to SSCs and classification of SSCs The scope of the corrective action program and self-assessment topic was clarified to indicate that it includes Operating Experience Make an editorial correction The Introduction was clarified to indicate that nuclear safety related items may be identified in a Q-List. The commitment to General Design Criteria I was corrected to indicate that some plants are committed to the 1967 proposed draft. Provide an alternate exception to NQA-1, Appendix 2A-1, for qualification / certification of inspection personnel applicable to Point Beach only. Revise FPL's commitment to Regulatory Guide 1.28, Regulatory Position C.1, to reflect the alternate exception for Point Beach. To reflect organizational changes 	 Changes for NextEra Energy Point Beach, LLC were reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment The clarifications and corrections were reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment The alternate exception to NQA-1, Appendix 2A-1, which is only applicable to Point Beach, is contained in the current NextEra Energy Point Beach, LLC, QATR (NextEra Energy PB-1), therefore, there is no change in commitment. Organizational changes were reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. 	

	Revision 3, 02/06/09	
	Change/Reason for Change Basis for Meeting 10CFR50	
•	Organizational changes	Organizational changes to align with fleet concepts
•	Editorial corrections	
•	Grammatical corrections	 Clarifications for electronic records
•	New Compliance Order	
•	Update audit requirement basis for FFD/AA	 Editorial and grammatical corrections
•	Clarification for electronic records	

Revision 4, 06/27/09		
Change/Reason for Change	Basis for Meeting 10CFR50	
Remove "FPL Energy" nomenclature and replace with "NextEra	This is a name change only and does not affect any commitments.	
Energy"		

Revision 5, 08/28/09		
Change/Reason for Change	Basis for Meeting 10CFR50	
 Organizational changes Title corrections Grammatical corrections Standardizing on FPL/NextEra Energy NUPIC reference clarification Standardizing on Nuclear Oversight 	 Organization changes, grammatical corrections, NextEra Energy nomenclature changes, and Nuclear Oversight name changes were reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. 	

	Revision 6, 03/05/10	
е то	Change/Reason for Change	Basis for Meeting 10CFR50
•	Revise Chief Nuclear Officer's new title to Executive Vice President and Chief Nuclear Officer Correct title and update responsibilities of Vice President Fleet Support Remove position of Vice President Nuclear Plant Support Remove position of Vice President Nuclear Capital Projects Add new position of Vice President Fleet Outages Planning and Execution	 This change reflects recent organizational changes, title changes, and realignment of responsibilities that were reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment.

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	Revision 7, 06/18/10	
,	Change/Reason for Change	Basis for Meeting 10CFR50
•	Company name change from FPL Group to NextEra Energy	This is a company name change only with corresponding CEO and COO title changes. This was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment.

	Revision 8, 10/22/10	
5.0	Change/Reason for Change	Basis for Meeting 10CFR50
•	Revise Table 1 Remove Table 2	 This change implements a restructuring of audit topic areas for the NextEra Energy Nuclear Oversight Auditing process to align with the Corporate Functional Area Manager (CFAM) areas. This will improve the effectiveness of reporting identified issues and support fleet standardization. This was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment.

	Revision 9, 02/18/11		
et a	Change/Reason for Change	Basis for Meeting 10CFR50	
•	To add an additional exception to NQA-1-1994 requirements for In- Storage Maintenance to Section B.7.	 This change provides an exception that provides greater flexibility in evaluating vendor recommendations as they apply to In-Storage Maintenance. This change was reviewed in accordance with 10 CFR 50.54, and it was determined not to constitute a reduction in commitment based on the fact that this exception has been approved by the NRC for other nuclear utilities. 	
•	Organizational Change creating position of Vice President Organizational Support and realigning organizational responsibilities from Vice President Fleet Support and adding the position of Director IT Business Solutions IM Nuclear Systems to Section A.2, Organization and the organizational chart to support cyber security program interface.	 This change creates a new position of Vice President Organizational Support, and realigns responsibilities previously assigned to the VP Fleet Support. Realignment of responsibilities was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. 	

Revision 10, 07/29/11		
Change/Reason for Change Basis for Meeting 10CFR50		
Organizational change to remove the position of Director Plant	• This change deletes an unused position from the QATR organizational	
Support from the site organization chart.	chart. This change was reviewed in accordance with 10 CFR 50.54(a)	
	and determined not to constitute a reduction in commitment.	

Revision 11, 02/10/12

Change/Reason for Change	Basis for Meeting 10CFR50
 Organizational change eliminating Vice President Nuclear Engineering Support and the Vice President Organizational Support positions. All of the responsibilities/functions currently reporting to these two positions will be aligned under the Vice President Nuclear Fleet Support. Functional position descriptions from the two eliminated positions are being moved into Section A.2.3.b Vice President Fleet Support, which is renamed Vice President Nuclear Fleet Support. 	• This change eliminates the Vice President Nuclear Engineering support and the Vice President Organizational Support, and realigns all responsibilities under the Vice President Nuclear Fleet Support. This change was reviewed in accordance with 10 CFR 50.54(a) and was determined not to constitute a reduction in commitment.

Revision 12, 07/03/12		
Change/Reason for Change	Basis for Meeting 10CFR50	
 Administrative change to: (1) Institute the NextEra Energy logo; (2) Clarify Section A.7.3 based on Confirmatory Action Letter EA-08-172 dated 10/20/08 (bulleted item # 24). 	• This change incorporates administrative changes. This change was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment.	
 Administrative change to: (1) Delete the limit on alternates consistent with Seabrook Station License Amendment 34; (2) Clarify Appendix B applicability to audit topics. 	 This change incorporates administrative changes. This change was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. 	
 Administrative change to: (1) Change title to Vice President Nuclear Fleet Technical Support; (2) Standardize to NextEra Energy; (3) Update title to President and Chief Executive Officer. 	 This change incorporates administrative changes. This change was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. 	

-	Revision 12, 07/03/12		
	Change/Reason for Change	Basis for Meeting 10CFR50	
•	Organizational change to: (1) Realigned a number of positions that reported up through the Vice President and Chief Strategy, Policy and Business Process Improvement Officer. As a result of these changes Vice President and Chief Information Officer will report to Vice Chairman and Chief Financial Officer. (2) An organizational announcement made on March 16, 2012 that relates to the future retirement of the Chairman and CEO. Effective July 1, 2012, the CEO will be replaced by the President and CEO.	 This change incorporates organizational changes. This change was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. 	
•	An organizational announcement was made on April 19, 2012 identifying a new position titled General Manager Issue Management, which reports to the Vice President Nuclear Fleet Technical Support. Two existing positions will be aligned under this General Manager, which is the Nuclear Engineering Chiefs Manager and the Nuclear Component Support & Inspection Manager. One General Manager title was changed from Functional Area Support to Nuclear CFAM.	 This change incorporates organizational changes. This change was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. 	
•	 An organizational announcement was made by the Chief Nuclear Officer on May 24, 2012 outlining the following changes that affect the QATR: A new position of Vice President CFAM and Outage Support was created that reports to the Vice President Nuclear Fleet Technical Support. A new position of Vice President Organizational Effectiveness was created that reports to the Vice President Nuclear Fleet Technical Support. A new position of General Manager of Operations has been created that reports to the Vice President CFAM and Outage Support. The new position of General Manager Issue Management has been renamed General Manager Engineering Rapid Response Team (ERRT). 	• This change incorporates organizational changes. This change was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment.	

	Revision 13, 04/01/13		
	Change/Reason for Change	Basis for Meeting 10CFR50	
	Restructured section C.3 "Independent Assessment" in its entirety by modifying the sequence of paragraphs within this section and making the following changes: Regrouped and consolidated internal audit topics to improve the efficiency and effectiveness of audit process execution. In support of this revision, Table 1 lists topics that are audited on either a fixed frequency or on a variable frequency as governed by an Expert Panel process. Table 2 lists the topics that are audited on a fixed frequency that is prescribed by regulatory requirements. As part of this change a more detailed list of applicable 10 CFR 50 Appendix B criteria, governing regulations and the corresponding audit frequencies has been removed from the QATR and has been added to an implementing procedure. Restructuring this section also clarifies the distinction between requirements that are applicable to the use of the fixed audit scheduling and the variable frequency audit scheduling methods.	 This change was evaluated in accordance with 10 CFR 50.54(a) requirements against the guidance in NUREG 0800, Standard Revi Plan (SRP). The SRP requires a commitment to audit compliance the requirements of 10CFR 50 Appendix B. NextEra Energy FPL-1 Quality Assurance Topical Report contains this commitment in sect A.7 "Regulatory Commitments". The SRP does not require that a specific listing of either audit topics or applicable Appendix B criteria described in the QATR. In addition, a note included in both the previous and proposed revisions to the QATR that applies to the Ta 1 & 2 assessment topics, states "Topic titles in these tables may va however, all program elements (i.e. applicable regulatory requirement and all 10CFR50 Appendix B criteria) will be covered as identified i implementing procedures". This change is consistent with the FPL Topical Quality Assurance Report that existed before transitioning to the QATR in that it only contained a list of audit topics and a statement that all criteria in Appendix B to 10 CFR Part 50 would be audited. The program me SRP and was approved by the NRC. Therefore, removing the more detailed list of applicable 10 CFR 50 Appendix B criteria, governing regulations and the corresponding a frequencies from the QATR does not constitute a "reduction in commitment". 	iew with tion a be able ary; ents in et the audit
•	An organizational announcement dated July 3, 2012 made by Vice President; Nuclear Fleet Technical Support rearranged a number of positions reporting to him. As part of this announcement, the position of General Manager Engineering Rapid Response Team was eliminated.	 This change incorporates organizational changes and was reviewed accordance with 10 CFR 50.54(a) and determined not to constitute reduction in commitment. 	d in a

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	Revision 14, 11/21/13		
	Change/Reason for Change Basis for Meeting 10CFR50		
•	Revise Section A.7, Regulatory Commitments for plants with an NFPA 805 Fire Protection licensing bases	This change identifies the Regulatory guide and NEI commitments that implement the NFPA 805 Licensing requirement. This change was reviewed in accordance with 10 CFR 50.54(a) and was determined not to	
•	Revise Appendix C "Fire Protection Equipment" definition	constitute a reduction in commitment.	

Revision 15, 09/01/14

Note: Since this QATR revision incorporates multiple Quality Program Revision Request (QPRR) packages, in some cases, pending QPRR revisions were impacted by subsequent QPRR revisions.

	Change/Reason for Change	Basis for Meeting 10CFR50
•	QPRR QR032: The site organizational chart was modified to show the Shift Technical Advisor (STA) position reporting to the "Shift Manager" position.	This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is an Organizational revision and persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations and therefore this is not considered a reduction in commitment.
•	QPRR QR033: The position of General Manager Organizational Effectiveness was introduced. The Emergency Preparedness and Chemistry CFAMs were included under the VP CFAM and Outage Support. The Director IT Business Solutions IM Nuclear Systems dotted line reporting function was moved from the Vice President Nuclear Fleet Technical Support to the new General Manager Organizational Effectiveness position. An editorial change in QATR Section C.1 changed the word "can" to "may" to be consistent with QATR Section A.5 (third bullet, last sentence).	This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is an Organizational revision and persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations and therefore this is not considered a reduction in commitment.
•	QPRR QR035: A change to the recently incorporated definition for Fire Protection Equipment was made to clarify what is specifically meant when referring to Quality-Related Fire Protection Equipment.	This change was evaluated in accordance with 10 CFR 50.54(a) requirements and the requirements of Regulatory Guide 1.205, December 2009, Risk-Informed, Performance-Based Fire Protection For Existing Light-Water Nuclear Power Plants. Since this change to the NextEra Energy quality assurance program description addresses the addition of a new commitment, it does not constitute a reduction in existing commitments. This change is a non-intent administrative change being made because the term "important to safety" is an undefined term. There is no reduction in commitment.

Revision 26

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	Revision 15, 09/01/14		
No	Note: Since this QATR revision incorporates multiple Quality Program Revision Request (QPRR) packages, in some cases, pending QPRR revisions were impacted by subsequent QPRR revisions.		
	Change/Reason for Change	Basis for Meeting 10CFR50	
•	QPRR QR036: The positions of Vice President Fleet Support Services and Director Fleet Design Engineering were created. The Vice President CFAM and Outage Support and the General Manager Organizational Effectiveness were realigned to report to the Vice President Fleet Support Services position. The Director Fleet Design Engineering reports to the Vice President Fleet Technical Support. The positions of Vice President Extended Power Uprate (EPU), EPU Project Implementation, and EPU Site Director have been eliminated due to completion of the EPU projects. Clarification of the reporting chain for the Director IT Business Solutions IM Nuclear Systems has been provided as part of this change. The position of Vice President Organizational Effectiveness was eliminated.	This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is an Organizational revision and persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations and therefore this is not considered a reduction in commitment.	
•	QPRR QR037: Project Momentum changes have been made to incorporate Fleet Design Engineering and Interfaces with Power Generation for Turbine Generators, large pumps and motors, thermal performance, and the Fleet Performance and Diagnostic Center. "NextEra Energy President and Chief Executive Officer" title changed to "NextEra Energy Chairman and Chief Executive Officer".	This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is an Organizational revision and persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations. The interfaces established with Power Generation will not affect any quality or safety-related functions described in the QATR. Therefore these changes are not considered reductions in commitments and continue to meet 10CFR 50 Appendix B requirements.	
•	QPRR QR038: The Nuclear Materials Manager position was eliminated at each site, and the Integrated Supply Chain (ISC) was reorganized. The "Executive Vice President Engineering, Construction & Corporate Services" title has changed to "Executive Vice President Engineering, Construction, and ISC".	This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is an Organizational revision and persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom necessary to perform their quality assurance functions and therefore this is not considered a reduction in commitment.	
•	QPRR QR041: "Executive Vice President and Chief Nuclear Officer" title changed to "President and Chief Nuclear Officer, Nuclear Division".	This change reflects and administrative title change that was reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment.	

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	Revision 16, 12/19/14	
1	Change/Reason for Change	Basis for Meeting 10CFR50
•	QR039: NextEra nuclear plants with a renewed Facility Operating License are committed to satisfy the intent of NUREG-1800, Branch Technical Position IQMB-I, "Quality Assurance for Aging Management Programs," and/or NUREG-1801 elements. The 10 CFR Part 50, Appendix B quality assurance program provides for corrective actions, the confirmation process, and administrative controls for Aging Management Programs (AMP) for license renewal. The scope of this existing QA program is expanded to include non-safety-related structures and components that are subject to an Aging Management Review (AMR) for license renewal. AR 01921585 identified that this issue was identified during the NRC License Renewal Inspection at PDA.	This change was evaluated in accordance with 10 CFR 50.54(a) and NUREG-1800 and 1801 requirements. The change is documenting previous commitments identified in the SER's that approved the renewed Facility Operating Licenses and is including these commitments in Section A.7 Regulatory Commitments. This change is not changing any requirements or commitments currently in the QATR and is not considered a reduction in commitment.
•	QR040: Revise Section A.2.1.2.d, General Manager Organizational Effectiveness to modify the "Licensing" functional responsibility to read: "Licensing, including licensing actions". Also, revise Section A.2.2.1.b, Licensing Manager to delete the words "licensing actions" from this position. This change is to show that the "licensing actions" are performed at the Corporate level.	This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is documenting the relocation of the licensing functional responsibility for "licensing actions" from the site Licensing organizations to the Corporate Licensing organization and does not change how this function is performed. This is not considered a reduction in commitment.
•	QR042: Revise Section A.2.1.2.I, Director Nuclear Assurance, through Nuclear Oversight Manager(s), to address the responsibility for the performance of receipt inspection to verify that purchased items comply with procurement documents at stations where receipt inspection is performed by the Nuclear Oversight Organization. (Reference: AR 1984358)	This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is documenting the additional responsibilities of the Director Nuclear Oversight and does not change how the function is performed. This is not considered a reduction in commitment.

Revision 17, 04/13/15		
Change/Reason for Change	Basis for Meeting 10CFR50	
QR043: Remove alternative Independent Assessment scheduling methodology utilizing the review and evaluation by an expert panel (Flexible Audit Scheduling) from Section C.3, Independent Assessment.	This change was evaluated in accordance with 10 CFR 50.54(a) requirements. ASME NQA-1-1994 states that audits shall be scheduled at a frequency commensurate with the status and importance of the activity. It does not specify either a flexible or fixed audit scheduling process. The deletion of the flexible audit scheduling process is not a reduction in commitment since the remaining fixed audit scheduling process continues	
 QR044: Organizational Announcement from Mano Nazar, President, Nuclear Division and Chief Nuclear Officer dated March 3, 2015. Section A.2, OrganizationNew positions, descriptions, and reporting relationships for Nuclear Chief Operating Officer; Vice President Projects Design and Execution, Director Fleet Regulatory Projects, General Manager Fleet Projects, and General Manager Fleet Engineering. Appendix E, Corporate Organization ChartOrganization Relationships of Key Management and Functional Groups (Corporate) for Nuclear Chief Operating Officer, Vice President Projects Design and Execution, and Director Fleet Regulatory Projects. Mové General Manager Fleet Engineering to report to the VP Fleet Support Services. Delete VP. Fleet Technical Support. Align General Manager Fleet Projects and Director Fleet Design Engineering under VP Projects Design and Execution. 	to meet the QATR basis document and 10 CFR 50. This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is an organizational revision and persons and organizations performing quality functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations and therefore this is not considered a reduction in commitment.	

Revision 18, 11/20/15		
Change/Reason for Change	Basis for Meeting 10CFR50	
QR045: Change "Director of Emergency Preparedness" to "Manager of Emergency Preparedness" due to the position Director of Emergency Preparedness being downgraded to Manager of Emergency Preparedness when the Director of Emergency Preparedness retired.	 This is a position title change only and does not affect any commitments. 	
 QR046: This revision has been prepared to incorporate the Vice President Fleet Technical Support organizational announcement made on April 30, 2015, and the Chief Nuclear Officer organizational announcement made on August 11, 2015. The April 30, 2015 announcement contains the addition of a General Manager CFAMs and Projects CFAM position and the realignment of the Director Fleet Design Engineering under the Vice President Fleet Technical Support. The August 11, 2015 announcement contains the realignment of the Nuclear Operations and Fleet Technical Support functions to the Chief Nuclear Officer. This revision also streamlines the A.2 Organization and Appendix E Corporate Organization Chart QATR sections to show senior management and interfacing positions reporting to the Chief Nuclear 	• This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is an Organizational revision and persons and organizations performing quality functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations and therefore this is not considered a reduction in commitment.	
QR047: The proposed revision to the QATR Appendix C has been submitted by Engineering in order to align fleet procedures, site procedures and the QATR by adding the following two additional categories to the definition of "Quality Related": (1) Instrumentation used in post accident monitoring and classified as Category 3 in response to the requirements of Regulatory Guide 1.97 (some Category 2 instruments may also be classified as Quality Related); and (2) Items or services that are subject to unique quality assurance requirements due to specific NRC imposed regulatory requirements.	 Selected elements of the Quality Assurance Program are 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. The proposed revision to the QATR definition of "Quality Related" was evaluated in accordance with 10 CFR 50.54(a) requirements and determined to not constitute a reduction to the commitments in the quality assurance program description as accepted by the NRC. This evaluation was based upon the proposed revision <u>adding</u> additional non safety related categories to the definition of "Quality Related". Therefore, the proposed revision is not considered to be a reduction in commitment. 	

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Revision 20, 02/17/17	
Change/Reason for Change	Basis for Meeting 10CFR50
QR049: Update Section B.4, Procurement Controls, Alternate Accreditation for laboratory testing facilities. NRC RIS 2016-01 accepts the methodology of NEI 14-05a for expanding the accreditation organizations of ISO/IEC 17025:2005 to ILAC (International Laboratory Accreditation Corporation) MRA signatories. This accreditation acceptance is used in lieu of source surveillance of M&TE equipment calibrations or tests.	 This change was evaluated in accordance with 10 CFR 50.54(a), <i>Conditions of License</i> requirements and NA-AA-210-1000, <i>Quality Assurance Program Administration</i> (Attachment 1). The Organizational and Administrative Changes described do not result in reduction of any QA Program commitment for the following reasons: Organizational revisions that ensure that persons and organizations
 QR049: Update Sections A.2, Organization and Appendix E, Organization Charts with Chief Nuclear Officer (CNO) Organization Announcement Dated August 11, 2016: Fleet Support: Vice President for Organizational Effectiveness and Learning will have responsibility for Security, Training, Licensing, Corporate Functional Area Managers, Continuous Improvement Program, Nuclear Oversight and the new Performance Improvement and Assessment group, including Performance Improvement. This position will report directly to the Chief Nuclear Officer. Project Controls: A new organization will be established for Project Controls that will report to the Vice President Project Controls & Strategic Alliances in an effort to make the organization more streamlined. The Project Controls team will realign under the Vice President Project Swill continue to lead projects and report directly to the CNO. Site Engineering Directors: Directors of Engineering at the sites will now report to the Site Vice Presidents. Engineering Fleet: Vice President Nuclear Fleet Engineering Support will report directly to the CNO along with five direct reports who will lead Programs, Probabilistic Risk Assessment, Equipment Reliability, Fuels and Chiefs. The CNO and Vice President Nuclear Fleet Engineering Support will work together to redefine functional core business, roles and responsibilities. The Nuclear Engineering Director Fleet will oversee the Chiefs organization and report to the Vice President Nuclear Fleet Engineering Support. 	 performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations. (paragraph vi) Quality Assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation or editorial items. (paragraph vii) The use of a quality assurance alternative or exception approved by an NRC safety evaluation provided that the bases of the NRC approval are applicable to NextEra Energy Nuclear Plants. (paragraph ii)

Revision 26

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Revision 20, 02/17/17	
Change/Reason for Change	Basis for Meeting 10CFR50
 Outage Managers: The Outage Managers will continue to report to the site but will now also be matrixed to the Vice President Fleet Outage. The fleet Outage organization and Vice President Fleet Outage will report to the Vice President Projects. The Vice President Projects and Vice President Fleet Outage will continue to refine the roles and responsibilities to outage performance. Site Leadership: The Seabrook Site Vice President, as part of individual development, will lead Point Beach performance in addition to responsibilities serving as the Site Vice President, which will report directly to the CNO. The Point Beach Site Vice President, will report directly to the Seabrook Site Vice President and have a dotted line reporting relationship to the CNO. 	

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Revision 20, 02/17/17	
Change/Reason for Change	Basis for Meeting 10CFR50
 QR049: Update Sections A.2, Organization and Appendix E, Organization Charts with Chief Nuclear Officer (CNO) Organization Announcement Dated January 3, 2017: Regional Support: To provide increased oversight to the plants, Regional Vice Presidents have been appointed to the Southern Region (St. Lucie and Turkey Point) and Northern Region (Duane Arnold, Point Beach, and Seabrook). The Site Engineering directors will report directly to the Regional Vice Presidents, as will Emergency Preparedness and Licensing managers. Site Leadership: As part of Accelerate, the roles of Site Vice President and Plant General Manager (PGM) will be merged into one streamlined role with the title of Site Director starting in 2017 with a targeted completion at all sites by mid-2018. These positions will report to the Regional Vice Presidents. The Site Director role will be responsible for Operations, Work Control, Maintenance, Radiation Protection, Chemistry, Outage, Performance Improvement, Safety and Training. Fleet Support: The Vice President Projects will take over responsibility for Engineering in addition to the current role leading Projects, combining it into one organization, inclusive of governance and oversight of fleet outages. The Business Operations, Project Control and Accounting teams will report to the Chief Financial Officer, New Nuclear Projects (Turkey Point 6 & 7) will report directly 	
 to the CNO. The Nuclear Assurance Manager will return to reporting to the CNO. 	

Revision 21, 04/21/17	
Change/Reason for Change	Basis for Meeting 10CFR50
QR050: Update the following sections: - A.7, Regulatory Commitments and B.15, Records: Add Reference To 10 CFR 73.70 (AR 2181687).	 This change involves the addition of reference to 10 CFR 73, Physical Protection of Plant and Materials to QATR Section A.7.1. The change also involves clarification to the requirements in QATR Section B.15, Records for the security record retention and quality. In establishing requirements for records, the QATR commits to NQA 1 Supplement 17S-1 and NQA-1 Non-mandatory Appendix 17A-1. Non-mandatory Appendix 17A-1, Section 3.6 identifies the Physical Security Plan and procedures as records which must be maintained for the lifetime of the plant. Records required by the security plan and procedures that meet the definition of a Quality Assurance Record are required to be retained as Quality Assurance Records and only those Quality Assurance Records that meet the criteria for lifetime QA Records require lifetime retention. Storage and retention of Security Procedures. 10 CFR 73.70, 10 CFR 73.55(q) and the Physical Security Plan, will be specified in applicable Security procedures. 10 CFR 73.55 (q) and 10 CFR 73 provide clarification to the requirements regarding record retention times for records. The addition of references 10 CFR 73.55 (g) and 10 CFR 73.70 is an Administrative improvement that does not result in a reduction in commitment. Compliance to all provisions of the Commission approved Physical Protection plan described by 10 CFR 73 is required as part of the licensing bases. The changes to QATR Sections A.7 and B.15 are Administrative changes as described by 10 CFR 50.54 (vii) because it involves an improvement which clarifies security record retention and quality requirements.
 C.3, Independent Assessment, Paragraph 3: Revise Paragraph 3, which refers to all independent assessments verifying procedure review and revision controls. 	 procedure review scope during the assessment/audit process. Audits include a comprehensive evaluation of activities and the procedures used to control those activities.

Revision 21, 04/21/17	
Change/Reason for Change	Basis for Meeting 10CFR50
ſ	 Procedure development, review, approval, issue, use, revision and review are evaluated as part of the QA Programs audit which is performed on a biennial basis. The change to QATR Section C.3 is an Administrative change as described by 10 CFR 50.54 (vii) because it involves clarification of the assessment /audit scope.
 B.4, Procurement Control, Bullet 3: Clarification to Regulatory Guide 1.28, Position C.3.2 for auditing and evaluation of suppliers. 	 Regulatory Guide 1.28 Revision 3, position C.3.2.2 states that the licensee should perform annual evaluations of suppliers. This evaluation should be documented and should take into account, where applicable, (1) review of supplier. furnished documents and records 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 current QATR takes exception for position C.3.2.2 where the information described therein is reviewed on a continuous basis 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. This proposed QATR revision will allow the option to continue to take exception with Regulatory Guide 1.28, Revision 3, position C.3.2.2 for continuous supplier reviews while also allowing the option for compliance with position C.3.2.2 for annual supplier reviews. The current QATR wording was written to only allow implementation of the exception process for continuous supplier reviews.
 Appendix E, Site Organization Chart: Show IT Business Solutions Manager in a dotted box, which reports to a Corporate position. 	 Supplier review process. This change is to correct an administrative error made during development of QATR Revision 20 describing the reporting responsibilities between the IT Business Solutions Manager and the Site Director. The change is an Administrative change as described by 10 CFR 50.54 (vii) and is not considered a reduction in commitment.

Revision 22, 05/28/19	
Change/Reason for Change	Basis for Meeting 10CFR50
 QR052: Section A.2 Organization & Appendix E: Site Organization Chart. Change the Department Name from Information Management to 	This change was evaluated in accordance with 10 CFR 50.54(a), Conditions of License requirements and NA-AA-210-1000, Quality Assurance Program Administration (Attachment 1).
Information Technology.	The Organizational and Administrative Changes described do not result in reduction of any QA Program commitment for the following reasons:
	 Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations. (paragraph vi)
	 Quality Assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation or editorial items. (paragraph vii)
	 The use of a quality assurance alternative or exception approved by an NRC safety evaluation provided that the bases of the NRC approval are applicable to NextEra Energy Nuclear Plants. (paragraph ii)
QR053 : This revision has been prepared to update the QATR to reflect the current organizational structure and update the table for the independent assessments to reflect that the Maintenance and Work Management audits are now performed as one audit versus two (change made to NA-AA-202-1000, Audit Topic Selection and Scheduling, Rev 11)	Organizational changes: These changes were evaluated in accordance with 10 CFR 50.54(a) requirements. The changes is an Organizational revision and persons and organizations performing quality functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations and therefore this is not considered a reduction in commitment.
	Change in audits: The table was changed to reflect that the Maintenance and Work Management audits are now performed as one audit versus two. As both areas are still audited there is no reduction in commitment.

NextEra Energy	
Quality	Assurance Topical Report (FPL-1)

Revision 22, 05/28/19	
Change/Reason for Change	Basis for Meeting 10CFR50
QR054 : Change was to incorporate change to the reporting relationship for Emergency Preparedness and Licensing and also for Performance Improvement and Training.	These changes are no longer applicable and required changes are in QR053.
QR056 : Update the QATR (Section B.4) to reflect the NRC provisional acceptance of ISO/IEC 17025 (2017 edition) applicable during the transition period set to expire on November 30, 2020 to allow accredited laboratories to transition from the current 2005 edition as provided by ISO	The NRC performed an independent review of ISO/IEC 17025:2017 and a gap analysis concluding that ISO 17025:2017 did not decrease or remove any of the technical and quality requirements that provided the basis for the NRC's initial recognition of the ILAC accreditation process. As a result, the NRC concluded that licensees and suppliers of basic components may procure calibration and/or testing services from domestic and international laboratories accredited to ISO/IEC 17025:2017 in lieu of performing a survey as part of the commercial-grade dedication process in accordance with the NRC's SE of NEI 14-05A for the transition period provided by ISO. Based on the above basis, the change described does not result in a reduction of any QA Program commitment as a result of the following: The use of a quality assurance alternative or exception approved by an NRC safety evaluation provided that the bases of the NRC approval are applicable to NextEra Energy Nuclear Plants. (paragraph ii).

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Revision 23, 12/02/19	
Change/Reason for Change	Basis for Meeting 10CFR50
QR057: Update the QATR to reflect the organizational structure following fleet organizational announcement. Correct numbering typo on page 14. (A.2.2.2.c versus A.2.2.1.c)	 This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is an Organizational revision and persons and organizations performing quality functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedulele when opposed to safety considerations. This change is not considered a reduction in commitment based on the following guidance in NA-AA-210-1000, Attachment 1: iii. The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles. 1v. The use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or, alternately, the use of descriptive text.
QR058: This revision is provided to update QATR references to commercial grade dedication using attachment 1 based on Regulatory Guide 1.164. Remove reference to EPRI NP-5652 and update with EPRI 3002002982. EPRI 3002002982 provided revision to EPRI NP-5652 and references Generic Letter 89-02 and 91-05.	 This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is allowing the use of a QA standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA program at the time of the change. This change is not considered a reduction in commitment based on the guidance in NA-AA-210-1000, Attachment 1, Step i., and the following: EPRI 3002002982 provided revision to EPRI NP5652 and reference Generic Letter 89-02 and 91-05. Regulatory Guide 1.164 endorses, in part, the EPRI 3002002982, Revision 1 to EPRI NP-5652 and TR-102260, "Plant Engineering: Guideline for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related

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Revision 23, 12/02/19	
Change/Reason for Change	
	Applications," with respect to acceptance of commercial-grade dedication of items and service to be used as basic components for nuclear power plants.
	the NRC staff in providing an adequate basis for dedication as defined in 10 CFR Part 21, and fulfills the QA requirement in Appendix B of 10 CFR Part 50, subject to the exceptions or clarifications provided in Regulatory Guide.

Revision 24, 05/05/20	
Change/Reason for Change	Basis for Meeting 10 CFR 50
QR059: The changes incorporated within this revision include the following: Revised to comply to NRC approved guidance but at a later revision than what is currently identified in RIS 2000-18, Guidance on Managing Quality Assurance Records in Electronic Media. (Section B.15)	 This change was evaluated in accordance with 10 CFR 50.54 (a) requirements. Exception added to reference the 2011 Nuclear Information and Records Management Association (NIRMA) technical guides as follows: QR059 (AR 02337142) TG 11-2011, Authentication of Records and Media, TG 15-2011, Management of Electronic Records, TG 16-2011, Software Quality Assurance Documentation and Records, TG 21-2011, Required Records Protection, Disaster Recovery and Business Continuation. This change was reviewed and approved by the NRC's in a response to Duke Energy's submittal letter (ADAMS – Accession No. ML14300A011, dated October 23, 2014) requesting a safety evaluation of the QATR amendment. The NRC evaluated the submittal and concluded "the newer 2011 version of the NIRMA technical guides provide additional implementing details that continue to meet the quality assurance record requirements contained in 10CFR 50 Appendix B, Criterion XVII." (ADAMS Accession No. ML15099A561, dated May 11, 2015) Based on the above, the change described does not result in a reduction of any QA Program commitment due to the use of a QA Standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA program at the time of the change.

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Revision 24, 05/05/20		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
QR060: The changes incorporated within this revision include the following: Adoption of a standard criterion for audit interval maximum extension of 25% of the audit interval and state the timeframe in months that shall not be exceeded.	 This change was evaluated in accordance with 10 CFR 50.54 (a) requirements. Adoption of standard industry criteria for maximum audit extensions. QR060 (AR 02350630) The change is requesting adoption of standard industry criteria for maximum audit extensions. The maximum extension of 25 percent of audit intervals is consistent with similar criteria approved by the NRC for multiple nuclear utilities, including but not limited to Southern Nuclear, Exelon, and First Energy. The NRC staff previously approved similar audit extension provisions siting that the revised program conforms to the acceptance criteria of NUREG-0800, sections 17.2, and continues to satisfy the quality assurance requirement of Appendix B to 10 CFR Part 50 and are therefore acceptable. U.S. NRC Letter with Safety Evaluation to Southern Nuclear Operating Company, Inc, ADAMS Accession No. ML051570349 U.S. NRC letter to Rochester Gas and Electric, "Approve or Proposed Revisions to the RG&E Corporation's RE Ginna Nuclear Power Plant Quality Assurance Program for Station Operation," July 22, 1998. ADAMS Accession No ML101820108. The proposed QATR changes described are in compliance with 10CFR50, Appendix B. The changes do not degrade the effectiveness of the audits performed under the NEE Quality Assurance Program and is not considered a reduction in commitment due to: "The use of a QA standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA Program at the time of the change." (per NA-AA-210-1000, Attachment 1) 	

Revision 24, 05/05/20		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
QR061: The changes incorporated within this revision include the following: Revise the reporting relationship of the CNO to reflect a direct report to the Chairman and CEO and to reflect responsibility of company officer responsible for ensuring that defects and non-compliances are reported to the NRC.	 This change was evaluated in accordance with 10 CFR 50.54 (a) requirements. Revise the reporting relationship of the CNO. QR061 (AR 2350967) Organizational revision and persons and organizations performing quality functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations. This change is not considered a reduction in commitment based on the following guidance in NA-AA-210-1000, Attachment 1: The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles. The use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or, alternately, the use of descriptive text. 	

Revision 25, 12/03/20		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
 QR062: 1. Update the QATR to reflect the organizational structure following fleet organizational announcements Station Director/PGM to Site Vice President Change dept names to match org chart Safety Assurance (remove "and Learning") Add Organizational Effectiveness and Learning Receipt inspection removed from NAA (PDA was the only site with RIs in NA) 2. Remove CEO signature from the Policy statement page per the CEO request. 3. Add details from QR 059 that were inadvertently not included in revision 024 (it is included in the revision section but the change was not in the body.) 	 This change was evaluated in accordance with 10 CFR 50.54 (a) requirements. 1. Update the QATR to reflect the organizational structure following fleet organizational announcements. The use of generic organizational charts to indicate functional relationships, authorities, and responsibilities, or, alternately, the use of descriptive text. (paragraph iv) 2. <i>Remove CEO signature from the Policy statement page per the CEO request.</i> Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations. (paragraph vi). 3. Add details from QR 059 that were inadvertently not included in revision 024 (it is included in the revision section but the change was not in the body.) 	

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Revision 25, 12/03/20		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
QR063: Duane Arnold Energy Center (PDA) is going to issue a stand-alone QATR to reflect the defueled / decommissioned status of the plant. The fleet QATR needs to be revised to remove references to and information specific to DAEC/PDA. Reference NRC Letter, Duane Arnold Energy Center – Approval of Quality Assurance Topical Report (FPL-3), Revision 0 (EPID L2020- LLQ-0002), dated August 27, 2020.	This change was evaluated in accordance with 10 CFR 50.54 (a) requirements. The change to remove references to Duane Arnold from the Fleet QATR, FPL-1 was submitted in parallel with the implementation of the Duane Arnold QATR FPL-3 (QR-DC-001). The NRC staff completed the review of FPL-3 Rev. 0 and determined that the document meet all regulatory requirements for a defueled/decommissioned plant (alternative program) and once issued, FPL-1 would no longer be applicable to Duane Arnold. The NRCs determinations are outlined in a letter dated August 27, 2020 (ADAMS Accession No. ML20225A000). The proposed QATR changes reviewed are in compliance with 10CFR50, Appendix B and the NRC approval letter. The changes do not degrade the compliance or effectiveness of the Fleet QATR FPL-1 and are not considered a reduction in commitment due to the NRC's acceptance of PDA QATR FPL-3 as:	
	NRC safety evaluation, provided that the bases of the NRC approval are applicable to NextEra Energy's nuclear plants."	

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Revision 26, 05/13/21		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
QR064: Due to redundancy of management reviews, delete the QATR requirement in Appendix A: On-Site Review Group, Section 4.0, (14) which states, "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)";. The oversight of the RPS/ESFAS channels that are bypassed are monitored thru the Operability Determination process and listed on the Daily Plant Status Report for continuous Management Review.	 This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The requirement was removed from the PSL Technical Specifications (TS) Section 6.5 for both units and placed into the QATR Appendix A in 2006 per License Amendment Request L-2006-221 (ML063040607) and approved by the NRC with U1&2 TS Amendments 202 &149 Minor Corrections 10-22-2007. This transitioned the review to a licensee-controlled requirement and not an NRC commitment. Based on the above, the change described does not result in a reduction of any QA Program commitment as a result of the following: Quality Assurance program changes involving administrative improvements and clarifications, spelling corrections, punctuation, or editorial items. (paragraph vii NA-AA-210-1000. 	

Revision 26, 05/13/21		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
 QR065: The changes incorporated within this revision include the following: Changes implemented due to issuance of NEI 14-045A, Rev 1 including clarifications and conservative adjustments. References to ISO/IEC 17025:2005 have been replaced with references to ISO/IEC 17025:2017, Clarifications on limits of use have been added to indicate the ILAC process is not intended to be utilized for the commercial grade dedication of Nondestructive Examination (NDE) services. Subcontracting of accredited services is prohibited. The ILAC process is intended for use by licensees and suppliers of basic components as a part of the commercial grade dedication process and must be used in conjunction with other NRC-endorsed commercial grade dedication guidance such as EPRI TR3002002982. A limitation has been placed on the use of remote accreditation assessments to maintain accreditation. Sample technical evaluations for both calibration and testing services have been included as attachments to NEI 14-05A, Rev.1. 	These changes were evaluated in accordance with 10 CFR 50.54 (a) requirements. The justification information below was reviewed and approved during the revision process for the respective QATR changes. The NRC SER dated February 19, 2021 concluded that NEI 14.05a, Revision 1 continues to provide an acceptable approach for licensees and suppliers subject to the QA requirements of Appendix B to 10 CFR Part 50 for using laboratory accreditation by ABs that are signatories to the ILAC MRA in lieu of performing commercial-grade surveys as part of the commercial-grade dedication process for procurement of calibration and testing services performed by domestic and international laboratories accredited by signatories to the ILAC MRA. (ADAMS Accession Number ML20322A019) Justification for Change: Based on the above, the change described does not result in a reduction of any QA Program commitment due to the use of a QA Standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA program at the time of the change.	

NextEra Energy Quality Assurance Topical Report (FPL-1)

Revision 26, 05/13/21		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
 QR066: The changes incorporated within this revision include the following: 1. To change the internal audit frequency from 24 months to 36 months and add an annual evaluation. 2. Remove the QC Program from Nuclear Assurance and Assessment responsibilities. 	These changes were evaluated in accordance with 10 CFR 50.54 (a) requirements. The justification information below was reviewed and approved during the revision process for the respective QATR changes. Justification for Change: The proposed change does not represent a reduction in effectiveness or compliance with 10 CFR 50 Appendix B, "Quality Assurance Criteria for Nuclear Power Plants." A comprehensive system of planned and periodic audits will continue to be performed by independent trained personnel using written procedures to verify compliance with all aspects of the QAP. The internal audit program will continue to be conducted on a performance driven frequency that is commensurate with the status and importance of the activity to be completed. Performance of functional area and vendor audits will continue to determine effectiveness of the program. The proposed frequency change supplemented by evaluation is similar to audit requirements outlined in ASME NQA-1-2015, "Quality Assurance for Nuclear Facility Applications," that was endorsed by Regulatory Guide 1.28, "Quality Assurance Program Criteria (Design and Construction)," Revision 5. This revision of NQA-1, Requirement 18, "Audits," Section 201.2, "Nuclear Facilities After Placing the Facility into Operation," references extending the 2-year internal audit interval to 3 years, not to exceed 4 years with performance of an annual evaluation. Also, the proposed changes are similar to ANSI/ANS 3.2-2012, "Managerial, Administrative and Quality Assurance Crotrols for the Operational Phase of Nuclear Power Plants," that was endorsed by Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 3. This quality standard also, provides guidance in section 3.18.1.1, "Regularly Scheduled Audits," for extending the 2-year frequency not to exceed 4 years with performance of an annual evaluation. In addition, the proposed 36-month audit frequency is consistent with external audit requirements for audit of suppliers and with NRC triennial i	

Revision 26, 05/13/21	
Change/Reason for Change	Basis for Meeting 10 CFR 50
	It should be noted that NextEra Energy is not adopting NQA-1-2015 or ANSI/ANS 3.2-2012 as part of this proposed change but is only citing those standards to show that the proposed frequencies are similar to other NRC endorsed standards. The variations between the proposed changes and NRC endorsed quality standards include setting the audit frequency to 36 months with 25% grace versus the 2-year frequency with a 1-year extension(s) not to exceed 4 years described in NQA-1- 2015 and ANSI/ANS 3.2-2012 standards. The proposed evaluation will focus on identifying areas that require audit activity prior to the next scheduled audit, rather than justifying extension.
	Functional area audits and evaluations would be separated into three cycles covering a period of 36 months. Each cycle includes a set of audits and evaluations. Results of the completed audits will be reviewed to determine if additional audit activities are necessary prior to their next scheduled performance. Each functional audit area will receive an additional performance analysis (evaluation) within 2 years of the last performed audit based on internal and external data; functional area changes in responsibility, resources, or management; and consideration of the impacts, as applicable, to determine if additional audit activities are necessary prior to the 36-month scheduled performance.
	These evaluations will meet the intent of the annual evaluation described in NRC endorsed quality standards by ensuring action by the audit organization upon evaluation of adverse performance trends should they exist prior to the next scheduled audit activity. The resulting action will be based on the problem identified and may include one or more of a variety of audit tools, such as simple observations, follow-up reviews, limited scope audits up to a full audit of the functional area.

Revision 26, 05/13/21		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
	In aggregate, these changes will continue to meet the fundamental requirements of an internal audit program as described in quality standards endorsed by the NRC and will continue to provide proper coverage of QAP activities. The changes will allow audits to be scheduled at a frequency commensurate with the status and importance of the activity. Evaluations of performance will be used to effectively focus audit resources in areas indicating gaps in QAP implementation.	
	Precedent Exelon Generating Company ML20287A130 11/5/2020.	
	References 1. ANSI N18.7-1972, "Administrative Controls for Nuclear Power Plants"	
	 ANSI N18.7-1976/ANS 3.2, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants (Limerick, Fitzpatrick, Clinton)" 	
	 ANSI/ANS 3.2-1988, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants (Braidwood, Byron, Dresden, LaSalle and Quad Cities)" 	
	4. Regulatory Guide 1.189, "Fire Protection for Nuclear Power Plants"	
	 NQA-1-1994, "Quality Assurance Program Requirement for Nuclear Facilities" 	
	Based on the above, the change described does not result in a reduction of any QA Program commitment due to the use of a QA Standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA program at the time of the change.	

Revision 26, 05/13/21	
Change/Reason for Change	Basis for Meeting 10 CFR 50
 QR-067 Rev. 1: The changes incorporated within this revision include the following: Add to section 1.2.5. Fleet Engineering - Fleet Capital Group Change Senior Director IT Business Solutions to Senior Director, IT Nuclear in section 1.2.1.2.i. 	These changes were evaluated in accordance with 10 CFR 50.54 (a) requirements and does not result in a reduction of any QA Program commitment due to the use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles. (iii)

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Appendix E: Organization Charts Chart 1 of 2: Corporate



Appendix E: Organization Charts Chart 2 of 2: Site

ORGANIZATION RELATIONSHIPS OF KEY MANAGEMENT & FUNCTIONAL GROUPS (SITE)



May 13, 2021

but physically located at sites

L-2021-115 10 CFR 50.54(a)(3) 10 CFR 50.55(f)(4)(i) Enclosure

ENCLOSURE 2 Florida Power and Light Company QAPD (FPL-2) Revision 10 (89 pages)



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Florida Power and Light Company

Quality Assurance Program Description

for 10 CFR Part 52 Licenses

FPL-2

POLICY STATEMENT

Florida Power and Light (FPL) shall design, procure, construct and operate nuclear plants in a manner that will ensure the health and safety of the public and workers. These activities shall be performed in compliance with the requirements of the Code of Federal Regulations (CFR), the applicable Nuclear Regulatory Commission (NRC) Facility Operating Licenses, and applicable laws and regulations of the state and local governments.

The FPL New Nuclear Projects (NNP) Quality Assurance Program (QAP) is the Quality Assurance Program Description (QAPD) provided in this document and the associated implementing documents. Together they provide for control of FPL activities that affect the quality of safety-related nuclear plant structures, systems, and components (SSCs) and include all planned and systematic activities necessary to provide adequate confidence that such SSCs will perform satisfactorily in service. The QAPD may also be applied to certain equipment and activities that are not safety-related, but support safe plant operations, or where other NRC guidance establishes program requirements.

The QAPD 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 QAP. Compliance with the QAPD and implementing documents is mandatory for personnel directly or indirectly associated with implementation of the FPL NNP QAP.

Approved By: **Richard Baird Director Nuclear Assurance & Assessment** 5/13/21 Date R. Coffey Vice President - Nuclear 2) Date D. Moul Executive Vice President and Chief Nuclear Officer 21 Date

POLICY	Y STATE	EMENT.		.2
PART I	INTRO	DUCTIC	DN	. 8
	SECTIO	ON 1	GENERAL	. 8
PART II		D DETAL	LS	10
	SECTIC	DN 1	ORGANIZATION	10
	Figure	1-1: NNF	² Construction and Startup Organization	21
	Figure 1	1-2: Nex	tEra Energy Nuclear Fleet Corporate Operating Organization	22
	Figure 1	1-3: Nex	tEra Energy Nuclear Fleet Site Organization	23
	SECTIC	DN 2	QUALITY ASSURANCE PROGRAM	24
	21	Respon	sibilitios	25
	2.1	Dologati	on of Mork	10
	2.2	Site and	offic Sofoty Polated Design Pagin Activities	20 26
	2.3	Doriodio	Poview of the Quality Accurance Program	10
	2.4	renouic	n and Devicien to Quality Assurance Program	20
	2.0	Demonstra	e and Revision to Quality Assurance Program	20
	2.0	Personn	el Qualincations	20
	Z.1	NQA-1-	1994 Commitment / Exceptions	27
	SECTIC	DN 3	DESIGN CONTROL	29
	3.1	Design \	/erification	9
	3.2	Design F	Records	10
	3.3	Compute	er Application and Digital Equipment Software	30
	34	Setpoint	Control	10
	3.5	NQA-1-1	1994 Commitment	31
	SECTIC	DN 4	PROCUREMENT DOCUMENT CONTROL	2
	4.1	NQA-1-1	1994 Commitment / Exceptions	32
	SECTIC	DN 5	INSTRUCTIONS, PROCEDURES, AND DRAWINGS	4
	5.1	Procedu	re Adherence	34
	5.2	Procedu	re Content	34
	5.3	NQA-1-1	1994 Commitment	34
	SECTIC	ON 6	DOCUMENT CONTROL	35
	~ /	_ .		_
	0.1	Review	and Approval of Documents	16
	0.2			16
	0.3	NQA-1-1	1994 Commitment	6
	SECTIO	ON 7	CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES 3	17
	7.1	Accepta	nce of Item or Service	37
	7.2	NQA-1-1	994 Commitment / Exceptions	8

TABLE OF CONTENTS (continued)

SECTION 8		IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS	42			
8.1	NQA-1	-1994 Commitment	42			
SECTION 9		CONTROL OF SPECIAL PROCESSES	43			
9.1	NQA-1	-1994 Commitment	43			
SECTION 10		INSPECTION	44			
10.1 10.2 10.3	Inspec Inspec NQA-1	tion Program tor Qualification -1994 Commitment / Exceptions	44 44 45			
SECTION 11		TEST CONTROL	46			
11.1 11.2	NQA-1 NQA-1	-1994 Commitment -1994 Commitment for Computer Program Testing	. 46 46			
SECT	ION 12	CONTROL OF MEASURING AND TEST EQUIPMENT	. 47			
12.1 12.2	Installe NQA-1	d Instrument and Control Devices -1994 Commitment / Exceptions	. 47 47			
SECT	ION 13	HANDLING, STORAGE, AND SHIPPING	. 48			
13.1 13.2	Housel NQA-1	<pre>keeping -1994 Commitment / Exceptions</pre>	. 48 . 49			
SECT	ION 14	INSPECTION, TEST, AND OPERATING STATUS	. 51			
14.1	NQA-1	-1994 Commitment	. 51			
SECT	ION 15	NONCONFORMING SERVICES, MATERIALS, PARTS, OR COMPONENTS	. 52			
15.1	Report	ing Program	. 52			
15.2			. 52			
SECT			. 53			
16.1 16.2	NQA-1	ng Program -1994 Commitment	. 53			
SECT	ION 17	QUALITY ASSURANCE RECORDS	. 54			
17.1 17.2	Record Electro	Retention	. 54			
17.3	NQA-1	-1994 Commitment / Exceptions	. 54			
SECTION 18 AUDITS						
18.1 18.2 18.3	Perforr Interna NQA-1	nance of Audits I Audits -1994 Commitment	. 55 . 56 . 57			

TABLE OF CONTENTS (continued)

PART III NONSAFETY-RELATED SSC QUALITY CONTROL							
SECTION 1	NON-SAFETY RELATED SSCs - SIGNIFICANT CONTRIBUTORS TO PLANT SAFETY						
SECTION 2	NON-SAFETY RELATED SSCs CREDITED FOR REGULATORY EVENTS 61						
PART IV REGULATORY COMMITMENTS							
REGULATORY GUIDES62							
STANDARDS.	STANDARDS						
PART V ADDITIONAL QUALITY ASSURANCE AND ADMINISTRATIVE CONTROLS FOR THE PLANT OPERATIONAL PHASE							
SECTION 1	DEFINITIONS						
SECTION 2	REVIEW OF ACTIVITIES AFFECTING SAFE PLANT OPERATION						
SECTION 3	OPERATIONAL PHASE PROCEDURES70						
SECTION 4	CONTROL OF SYSTEMS AND EQUIPMENT IN THE OPERATIONAL PHASE77						
SECTION 5	PLANT MAINTENANCE						
PART VI REVISION SUMMARIES							

FPL-2 Revision 10

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PART I INTRODUCTION

SECTION 1 GENERAL

The Florida Power & Light Company (FPL) New Nuclear Projects (NNP) Quality Assurance Program Description (QAPD) is the top-level policy document that establishes the quality assurance policy and assigns major functional responsibilities for Combined Operating License (COL) construction, pre-operation and operations activities conducted by or for FPL. The QAPD describes the methods and establishes quality assurance (QA) and administrative control requirements that meet 10 CFR 50, Appendix B and 10 CFR 52. The QAPD is based on the requirements and recommendations of ASME NQA-1-1994, "Quality Assurance Requirements for Nuclear Facility Applications," Parts I, II and III, as specified in this document.

New Nuclear Projects is responsible for development of the licensing actions needed in support of new nuclear site development. Responsibilities also include engineering oversight of contractors, site layout, staffing and program development, and operational readiness. The executive charged with the roles and responsibilities of New Nuclear Projects reports directly to the Chief Nuclear Officer and is assisted by a support staff during the inactive construction phase of the project. Initially, when active construction commences, New Nuclear Projects is responsible for construction planning and preparation. The responsibility for construction transitions to the executive for Site Construction at the start of active construction activities when filled. New Nuclear Projects responsibilities include the establishment and execution of a contract or contracts for the engineering, procurement, construction, and startup activities of new nuclear plants. Organizational control and responsibility for newly constructed nuclear generating units transfers to the Chief Nuclear Officer following the completion of unit specific construction activities and prior to loading of fuel. As a new nuclear plant approaches startup, the site organization transitions from the development / construction focused organization to the Operating Plant Site Organization.

The VP New Nuclear Projects reports to the Executive VP Engineering, Construction, & Supply Chain at the commencement of active construction. This reporting relationship allows the Chief Nuclear Officer and Nuclear Generation to remain focused on improving the performance of the operating fleet and minimize the distractions associated with the construction of new nuclear generating plants. This position will be filled in support of the start of construction activities for a new nuclear plant. This position is responsible for the control and oversight of all construction activities associated with a new nuclear unit. Reporting to this position will be the Licensing Director New Nuclear Projects and Project Director New Nuclear Projects. This position will transfer responsibilities for the construction activities and prior to the loading of fuel in that unit. This position will retain responsibilities for other units under construction at a multi-unit site until construction activities for each unit are completed. This position is supported during these construction activities by other Nuclear organizations as needed.

PART I INTRODUCTION (CONTINUED)

The QAP is defined by the NRC-approved regulatory document that describes the QA elements (i.e. the QAPD), along with the associated implementing documents. Procedures and instructions that control NNP activities will be developed prior to commencement of those activities. Policies establish high-level responsibilities and authority for carrying out important administrative functions which are outside the scope of the QAPD. Procedures establish practices for certain activities which are common to all FPL organizations performing those activities so that the activity is controlled and carried out in a manner that meets QAPD requirements. Procedures specific to a site, organization, or group establish detailed implementation requirements and methods, and may be used to implement policies or be unique to particular functions or work activities.

1.1 Scope / Applicability

The QAPD applies to construction, pre-operation and operations activities affecting the quality and performance of safety-related structures, systems, and components, including, but not limited to:

Designing	Receiving	Pre-Operational Activities (Including ITAAC)
Siting	Storing	Operating
Procuring	Constructing	Maintaining
Fabricating	Erecting	Repairing
Cleaning	Installing	Modifying
Handling	Inspecting	Refueling
Shipping	Testing	Training
	Startup	Decommissioning

Safety-related SSCs, under the control of the QAPD, are identified by design documents. The technical aspects of these items are considered when determining program applicability, including, as appropriate, an item's design safety function. The QAPD may be applied to certain activities where regulations other than 10 CFR 50 and 10 CFR 52 establish QA requirements for activities within their scope.

This QAPD was developed to address COL activities associated with Turkey Point Units 6 and 7 and any future nuclear power units pursued by Florida Power & Light Company in accordance with 10 CFR Part 52. This QAPD does not apply to any of the existing FPL/NextEra Energy nuclear power plants.

The policy of FPL is to assure a high degree of availability and reliability of the nuclear plants while ensuring the health and safety of its workers and the public. Towards this end, selected elements of the QAPD are also applied to certain equipment and activities that are not safety-related, but support safe, economic, and reliable plant operations, or where other NRC guidance establishes quality assurance requirements. Implementing documents establish program element applicability.

The definitions provided in ASME NQA-1–1994, Part I, Section 1.4, apply to select terms as used in this document.

PART II QAPD DETAILS

SECTION 1 ORGANIZATION

This section describes the FPL organizational structure, functional responsibilities, levels of authority and interfaces for establishing, executing, and verifying QAPD implementation. The organizational structure includes corporate and on-site functions for NNP including interface responsibilities for multiple organizations that perform quality-related functions. Implementing documents assign more specific responsibilities and duties, and define the organizational interfaces involved in conducting activities and duties within the scope of the QAPD. Management gives careful consideration to the timing, extent and effects of organizational structure changes.

The FPL management senior position responsible for the Quality Assurance organization is responsible to size the Quality Assurance organization commensurate with the duties and responsibilities assigned.

The FPL NNP organization is responsible for new nuclear plant licensing, engineering, procurement, construction, startup and operations development activities. There are several organizations within FPL which implement and support the QAPD. These organizations include, but are not limited to, the NNP organization, Corporate Services and Quality Assurance.

Design, engineering and construction services are provided to the FPL New Nuclear Projects organization by two primary contractors in accordance with their own QAPDs. These two contractors are the A/E Firm and the NSSS vendor.

No later than six months prior to fuel load of the unit, those positions which are identified for Operations will be staffed and have the appropriate authority required to perform operations activities. It is anticipated that even after fuel load, construction activities will be ongoing. Those positions required to support these activities will retain their applicable construction/pre-operation responsibilities until it is deemed that they are no longer necessary. As the construction of systems (or portions thereof) is completed, control and authority (including oversight, configuration and operations) is transferred from the contractor to the FPL departments in the operations phase. During the transition, responsibilities will be clearly defined in instructions and procedures to ensure appropriate authority is maintained for each SSC.

The following sections describe the reporting relationships, functional responsibilities and authorities for the organizations that implement and support the NNP QA Program. The NNP construction and startup organization and the FPL Fleet operating organization are shown in Figures 1-1, 1-2 and 1-3, respectively.

SECTION 1 ORGANIZATION (CONTINUED)

1.1 NNP Construction and Startup Organization

1.1.1 NextEra Energy 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 for the promulgation of corporate policy through the Company's senior management staff. The President and CEO is responsible for developing, implementing, and verifying execution of the FPL Quality Assurance Program. Responsibility for implementing the FPL Quality Assurance Program is delegated to the Chief Nuclear Officer and the authority for developing and verifying execution of the program is delegated to the Director Nuclear Assurance.

1.1.2 Executive Vice President – Engineering, Construction and Corporate Services

This position reports to the CEO and is the project executive responsible for active construction of the new nuclear plant. This position is the interface between the NNP project and the senior executive staff.

1.1.3 Vice President – New Nuclear Projects

The Vice President – New Nuclear Projects, reports to the Executive Vice President -Engineering, Construction and Corporate Services and is responsible for the overall safe and efficient licensing, engineering, construction and pre-operational test of the New Nuclear Projects, and for the implementation of quality assurance requirements in the areas specified by the QAPD.

1.1.4 Executive Vice President and Chief Nuclear Officer (CNO)

This position reports to the Chairman and 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. <u>The CNO is designated as the Company Officer responsible for ensuring that defects and non-compliances are reported to the NRC as required by 10CFR21.</u>

1.1.5 Licensing Director – New Nuclear Projects

The Licensing Director – New Nuclear Projects reports to the Vice President – New Nuclear Projects and is responsible for the generation of the Combined Operating License (COL) application, and is responsible for the day-to-day oversight of the COL application contractor and assuring corrective action is taken for any quality concerns that are raised. This position is also responsible for the licensing actions associated with the New Nuclear Projects through the final licensing action associated with the new nuclear project.

SECTION 1 ORGANIZATION (CONTINUED)

1.1.6 Project Director – New Nuclear Projects

The Project Director – New Nuclear Projects, reports to the Vice President – New Nuclear Projects, is responsible for the construction and test of the new nuclear plant and is accountable for ensuring that company policy and procedures are properly implemented at the nuclear site.

1.1.7 Construction Director – New Nuclear Projects

The Construction Director reports to the Project Director – New Nuclear Projects, and is responsible to interface with the NSSS supplier, the selected A/E, and the constructor. This position is responsible for the day to day oversight of the construction effort as the new nuclear plant is constructed, and for assuring corrective action is robust for any construction quality concerns that are raised by the Contractor or by FPL personnel.

1.1.8 Engineering Site Director – New Nuclear Projects

The Engineering Site Director – Units 6 & 7 reports to the Project Director – New Nuclear Projects, and is responsible to interface with the NSSS supplier, and the selected A/E. This position is responsible for the day to day oversight of the engineering effort as the new nuclear plant is designed and constructed, and for assuring that corrective action is robust for any engineering issues that are raised by the Contractor or by FPL personnel.

1.1.9 Quality Assurance Project Manager– New Nuclear Projects

The New Nuclear Projects Quality Assurance Project Manager (QAPM) reports directly to the Director Nuclear Assurance, and is responsible for the development and verification of implementation of the QAPD described in this document. The QAPM is responsible for verifying compliance with regulatory requirements and procedures through audits and technical reviews; for monitoring organization processes to ensure conformance to commitments and licensing document requirements; for verifying that vendors who provide quality services, parts and materials to the new nuclear project are meeting the requirements of 10 CFR 50, Appendix B through NUPIC or FPL vendor audits. The QAPM has sufficient independence from other New Nuclear Projects priorities to bring forward issues affecting safety and quality and make judgments regarding quality in all areas necessary regarding FPL's nuclear development activities. The QAPM may make recommendations to the New Nuclear Projects management regarding improvement in the quality of work processes. If the QAPM disagrees with actions taken by the organization in this regard and is unable to obtain resolution, the QAPM shall inform the Director Nuclear Assurance.

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1.1.10 Plant General Manager – New Nuclear Projects

The Plant General Manager – New Nuclear Projects reports directly to the CNO and is responsible for plant operation and administratively to the Vice President New Nuclear Projects during construction. This position is responsible for development of the site operating and support staff, and for operation of the new nuclear plant during the test phase. During construction, the Plant General Manager coordinates activities with the Vice President New Nuclear Projects to provide for equipment operation, maintenance and test including Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC)

In this position, as the plant moves into the operations phase, the Plant General Manager assures the safe, reliable, and efficient operation of the plant within the constraints of applicable regulatory requirements, combined operating license, and the QAP. Functional areas of responsibility also include chemistry activities, fuel handling (receipt, movement, and storage), health physics/radiological protection, operations and support, maintenance and production planning, and related procedures and programs.

1.1.11 Testing Director

The Testing Director reports to the Project Director – NNP, and is responsible to coordinate the test program for the new nuclear plant. This position is responsible to develop the test program and to support the contractors and the operating staff through the plant test and startup phase.

1.1.12 Vice President - Integrated Supply Chain

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

1.1.13 Manager - Sourcing

This position reports to the Vice President Integrated Supply Chain with direct interface with the <u>VP-NNP</u>. The position has functional areas of responsibility that include the authority for day-today material support activities at the site. Activities include contract coordination, procurement document control, and receipt and control of material.

1.1.14 Nuclear Steam Supply System (NSSS) Design Control Document (DCD) Holder

The NSSS DCD Holder provides plant design and licensing of the plant on the FPL site. These engineering services for new nuclear generation include engineering and design necessary to support construction activities within the scope of the certified design.

1.1.15 A/E / Constructor

The A/E Firm provides engineering services. These engineering services include site specific design activities necessary to support planning for preconstruction and construction of new nuclear generation. The Constructor provides construction services for the new plant.

In establishing its organizational structure, NextEra Energy 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.

1.2 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.

1.2.1 NextEra Energy 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 corporate policy through the Company's senior management staff. Responsibility for implementing the Quality Assurance Program is delegated to the Chief Nuclear Officer and authority for developing and verifying execution of the program is delegated to the Director Nuclear Assurance & Assessment.

1.2.2 Executive Vice President and Chief Nuclear Officer (CNO)

This position reports to the Chairman and 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. <u>The Executive Vice President and CNO is</u> designated as the Company Officer responsible for ensuring that defects and non-compliances are reported to the NRC as required by 10CFR21.

1.2.3 Vice President Nuclear

This position reports to the CNO and is responsible for governance and oversight of the following:

- Performance Improvement
- Security
- Fleet Training
- Licensing
- Interface with Nuclear Information Technology
- Continuous Improvement Program
- Fleet Projects (including capital projects, project control, project implementation, and ISFSI)
- Development and implementation of the programs associated with regulatory driven projects across the fleet.
- Outages
- Fleet Engineering Support
- Safety Assurance
- Fuels
- Center for Work Excellence
- Organizational Effectiveness and Learning

1.2.4 Sr. Director Nuclear Fleet Finance

This position reports to the CNO and is responsible for the following:

- Nuclear fleet budgets
- Spending authorization
- Key performance indicators

1.2.5 General Manager Fleet Engineering

The General Manager Fleet Engineering reports to the Vice President Nuclear and is responsible for:

- Fleet Engineering
 - Nuclear Fuels
 - Engineering Technical Governance & Oversight
 - Engineering Programs Governance & Oversight
 - Fleet Capital Group

1.2.6 Sr. Director Fleet Projects and Construction

The Sr. Director Fleet Projects and Construction reports to the Vice President Nuclear and is responsible for the Engineering Construction Alliance interface including project controls implementation and engineering.

1.2.7 Safety Assurance General Manager

This position reports to the Vice President Nuclear and will oversee regulatory affairs, emergency preparedness, access / fitness for duty and probabilistic risk assessment.

1.2.8 Organizational Effectiveness and Learning General Manager

This position reports to the Vice President of Nuclear and will oversee training & accreditation, Performance Improvement and Organizational Effectiveness.

1.2.9 Vice President Integrated Supply Chain (ISC)

This position reports to the CEO through the Executive Vice President Engineering, Construction and ISC and is responsible through ISC directors for the following:

- Procurement Engineering
- Coordinating Contract Activities
- Negotiating, generating, and issuing procurement documents for required items and services supporting the operation, licensing, maintenance, modification, and inspection at the nuclear plants, and for materials and equipment to support the Nuclear Division staff
- 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 Controlling materials received at each nuclear plant site in accordance with company policy and procedures

1.2.10 Senior Director, IT Nuclear

This position reports to the NextEra Energy Vice President and CFO through the Vice President and CIO and is responsible for the following:

- Nuclear information technology such as computer-related hardware and software acquisition, deployment, maintenance, control and replacement; telecommunications
- Information / cyber security; and applicable training
- Interface with the organizational effectiveness manager
- Management of information technology
- Nuclear cyber security
- Computer-related hardware/software acquisition
- The functions are supported via staff at both corporate and site levels.

1.2.11 Vice President and Chief Information Officer

This position reports to the NextEra Energy Vice Chairman and CFO. The CIO is responsible for:

- Nuclear Information Management (such as computer-related hardware and software acquisition, deployment, maintenance, control and replacement)
- Telecommunications
- Information / Cyber Security
- Applicable Training

The Vice President Information Technology reports to this position.

1.2.12 Director Nuclear Assurance & Assessment

This position reports to and has direct access to the CNO for resolution of any areas in question. This position is responsible for the following:

- Activities that include establishing, maintaining, and interpreting quality assurance practices and policies (including this QAPD)
- Managing independent assessment (Quality Assurance {QA}) and establishing quality control practices and policies for quality verification activities
- Facilitating actions deemed necessary to prevent unsafe plant conditions or a significant violation of the QAP; including Stop Work authority at the sites and corporate offices
- Periodically apprising the CNO of the status of the quality assurance program at NextEra Energy facilities and immediately apprising senior management of significant problems affecting quality; and verifying implementation of solutions for significant conditions adverse to quality identified by Nuclear Assurance
- Establishing the requirements for assessor and inspector certification; and providing for supplier evaluation
- Conduct of supplier assessments or surveys; and verification that supplier quality assurance programs comply with NextEra Energy requirements

1.2.13 Vice President - New Nuclear Projects

The Vice President - Nuclear shall perform the roles and responsibilities of the Vice President New Nuclear Projects and initially reports to the Chief Nuclear Officer and is responsible for:

- Project Administration
- Coordination and overall performance of the project
 - Vendor Contract Compliance
 - Quality
 - Timeliness
 - Error Free Performance

Upon FPL's decision to begin active construction, the Vice President New Nuclear Projects along with the New Nuclear Projects organization, transitions to reporting to the Executive Vice President Projects, Engineering, & Construction.

1.2.14 Licensing Director - Nuclear Licensing Projects

The Licensing Director - Nuclear Licensing Projects reports to the Vice President - New Nuclear Projects and is responsible for:

- Maintenance of the COL
- Day-to-day oversight of the COL application contractor and assuring corrective action is taken for any quality concerns that are raised
- Licensing actions associated with the New Nuclear Projects through the final licensing action associated with the new nuclear project

1.3 Site Organization

The following site management positions describe the typical operating 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. (This does not reflect organizations in decommissioning status.)

1.3.1 Site Vice Presidents

These positions report to the CNO and are responsible for the safe operation of the nuclear plant. The Site Vice Presidents have control of the onsite resources necessary for the safe operation and maintenance regardless of organizational reporting.

In this position, the Site Vice Presidents assure 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), radiation protection, operations and support, engineering, maintenance and work control, security, safety, and related procedures and programs. The Onsite Review Group serves the Site Vice Presidents in a technical capacity and provides review of plant safety and performance (see Appendix A).

1.3.1.a___ Engineering Site Director___

This position reports to the Site Vice President. 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.

This position is also responsible for NUREG-0737, Action Plan Item I.B.1.2 technical review functions that St. Lucie Unit 2 and Seabrook Station are committed to and implement by system health monitoring, development of a quarterly system health report which provides system performance and status to senior management, and development and implementation of the Maintenance Rule Program.

1.3.1.b Safety Assurance and Learning Station Director

This position reports to the Site Vice President and oversees training and accreditation, regulatory affairs, emergency preparedness, safety and Security.

1.3.1.c Licensing Manager

This position reports to the Safety Assurance and Learning Station Director and is responsible for site regulatory interfaces.

1.3.1.d Training Site Manager

This position reports to the Safety Assurance and Learning Station Director and functionally interfaces with the Training Fleet Director (offsite) and is responsible for training. The Site 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.

This position is also responsible for NUREG-0737, Action Plan Item I.B.1.2 technical review functions committed to regarding the oversight, implementation, and coordination of internal and external operating experience.

1.3.1.e Emergency Preparedness Manager

This position reports to the Licensing Manager and functionally interfaces with the Manager of Emergency Preparedness (offsite) and is responsible for maintaining and implementing the emergency plan for the station.

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

1.3.2.a Project Site Manager

This position reports to the Sr. Director Projects and Construction with direct interface with the Site Vice President and is responsible for installing plant modifications as a result of design changes and implementing other major projects.

1.3.2.b Nuclear Assurance Manager

This position reports to the Director Nuclear Assurance & Assessment (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

FPL Quality Assurance Program Description

SECTION 1 ORGANIZATION (CONTINUED)

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.

1.5 Authority

1.5.1 Authority to Stop Work

Quality assurance and inspection personnel have the authority, and the responsibility, to stop work in progress which is not being done in accordance with approved procedures or where safety or SSC integrity may be jeopardized. This extends to off-site work performed by suppliers that furnish safety-related materials and services to FPL.

1.5.2 Quality Assurance Organizational Independence

For construction, independence shall be maintained between the organization or organizations performing the checking (quality assurance and control) functions and the organizations performing the functions. This provision is not applicable to design review/verification.

1.5.3 NQA-1-1994 Commitment

In establishing its organizational structure, FPL commits to compliance with NQA-1-1994, Basic Requirement 1 and Supplement 1S-1.

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FPL-2 Revision 10



Figure 1-3: NextEra Energy Nuclear Fleet Site Organization



NEXTERA ENERGY NUCLEAR FLEET SITE ORGANIZATION Figure 1-3 (Revision 7)

SECTION 2 QUALITY ASSURANCE PROGRAM

FPL has established the necessary measures and governing procedures to implement the QAP as described in the QAPD. FPL is committed to implementing the QAP for all aspects of work that are important to the safety of the nuclear plants as described and to the extent delineated in the QAPD. Further, FPL ensures through the systematic process described herein that its suppliers of safety-related equipment or services meet the applicable requirements of 10 CFR 50, Appendix B. Senior management is regularly apprised of the adequacy of implementation of the QAPD through the audit functions described in Part II, Section 18.

The objective of the QAPD is to assure that FPL's nuclear generating plants are designed, constructed, and operated in accordance with governing regulations and license requirements. The program is based on the requirements of ASME NQA-1-1994, "Quality Assurance Requirements for Nuclear Facility Applications," as further described in this document. The QAPD applies to those quality-related activities that involve the functions of safety-related structures, systems, and components (SSCs) associated with the design (excluding Design Certification activities), fabrication, construction, and testing of the SSCs of the facility and to the managerial and administrative controls to be used to assure safe operations. A list or system that identifies SSCs and activities to which this program applies is maintained at the appropriate facility. The Design Certification Document is used as the basis for this list. Cost and scheduling functions do not prevent proper implementation of the QAPD.

As described in Part III of the QAPD, specific program controls are applied to non-safety-related SSCs, for which 10 CFR 50, Appendix B, is not applicable, that are significant contributors to plant safety. The specific program controls consistent with applicable sections of the QAPD are applied to those items in a selected manner, targeted at those characteristics or critical attributes that render the SSC a significant contributor to plant safety.

Delegated responsibilities may be performed under a supplier's or principal contractor's QAPD, provided that the supplier or principal contractor has been approved as a supplier in accordance with the QAPD. Periodic audits and assessments of supplier QA programs are performed to assure compliance with the supplier's or principal contractor's QAPD and implementing procedures. In addition, routine interfaces with supplier personnel provide added assurance that quality expectations are met.

New nuclear plant construction will be the responsibility of FPL's NNP organization. Detailed engineering specifications and construction procedures will be developed to implement the QAPD and NSSS QA programs prior to commencement of construction activities.

In general, the program requirements specified herein are detailed in implementing procedures that are either FPL implementing procedures, or supplier implementing procedures governed by a supplier quality assurance program.

A grace period of 25 percent may be applied to provisions that are required to be performed on a periodic basis, unless otherwise noted. Annual evaluations and audits that must be performed on a triennial basis are examples where the 25 percent grace period could be applied. The grace period does not allow the "clock" for a particular activity to be reset forward. The "clock" for an activity is reset backwards by performing the activity early. Audits schedules are based on the month in which the audit starts.

2.1 Responsibilities

Personnel who work directly or indirectly for FPL are responsible for achieving acceptable quality in the work covered by the QAPD. This includes the activities delineated in Part I, Section 1.1. FPL personnel performing verification activities are responsible for verifying the achievement of acceptable quality. Activities governed by the QAPD 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. Verification is performed against these criteria. Provisions are established to designate or identify the proper documents to be used for an activity, and to ascertain that such documents are being used. The Quality Assurance Project Manager is responsible for verification that processes or procedures comply with QAPD and other applicable requirements, that such processes or procedures are implemented, and that management appropriately ensures compliance.

2.2 Delegation of Work

FPL retains and exercises the responsibility for the scope and implementation of an effective QAP. Positions identified in Part II, Section 1, of this QAPD 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 their nature and effect, and with any necessary technical advice or review.

2.3 Site-specific Safety-Related Design Basis Activities

Site-specific safety-related design basis activities are defined as those activities, including sampling, testing, data collection, and supporting engineering calculations and reports, that will be used to determine the bounding physical parameters of the site. Appropriate quality assurance measures are applied.

2.4 Periodic Review of the Quality Assurance Program

Management of those organizations implementing the QA program, or portions thereof, assesses the adequacy of that part of the program for which it is responsible to ensure effective implementation at least once each year or at least once during the life of the activity, whichever is shorter. However, the required periodicity for the assessment of QA programs during the operations phase may be extended to once every two years.

2.5 Issuance and Revision to Quality Assurance Program

Administrative control of the QAPD will be in accordance with 10 CFR 50.55(f) and 10 CFR 50.54(a). Changes to the QAPD are evaluated by the Quality Assurance Project Manager to ensure that such changes do not degrade previously approved quality assurance controls specified in the QAPD. This document shall be revised as appropriate to incorporate additional QA commitments that may be established during the Combined Operating License (COL) application development process. Revisions to the document will be reviewed, at a minimum, by the FPL Director Nuclear Assurance and approved by the Vice President – New Nuclear Projects.

Regulations require that the Final Safety Analysis Report (FSAR) include, among other things, the managerial and administrative controls to be used to assure safe operation, including a discussion of how the applicable requirements of Appendix B will be satisfied. In order to comply with this requirement, the FSAR references the QAPD and, as a result, the requirements of 10 CFR 50.54(a) are satisfied by and apply to the QAPD.

2.6 Personnel Qualifications

The minimum qualifications of the Director – Nuclear Assurance and the New Nuclear Projects Quality Assurance Project Manager are that each holds an engineering or related science degree and a minimum of four years of related experience including two years of nuclear power plant experience, one year of supervisory or management experience, which one year of the experience is in performing quality verification activities. Special requirements shall include management and supervisory skills and experience or training in leadership, interpersonal communication, management responsibilities, motivation of personnel, problem analysis and decision making, and administrative policies and procedures. Individuals who do not possess these formal education and minimum experience requirements should not be eliminated automatically when other factors provide sufficient demonstration of their abilities. These other factors are evaluated on a case-by-case basis and approved and documented by senior management.

The minimum qualifications of the individuals responsible for planning, implementing, and maintaining the programs for the QAPD are that each has a high school diploma or equivalent and has a minimum of one year of related experience. Individuals who do not possess these formal education and minimum experience requirements should not be eliminated automatically when other factors provide sufficient demonstration of their abilities. These other factors are evaluated on a case-by-case basis and approved and documented by senior management.

2.7 NQA-1-1994 Commitment / Exceptions

In establishing qualification and training programs, FPL commits to compliance with NQA-1-1994, Basic Requirement 2 and Supplements 2S-1, 2S-2, 2S-3 and 2S-4, with the following clarifications and exceptions:

- NQA-1-1994, Supplement 2S-1
 - Supplement 2S-1 will include use of the guidance provided in Appendix 2A-1 in the same manner as if it were part of the Supplement. The following two alternatives may be applied to the implementation of this Supplement and Appendix:
 - (1) In lieu of being certified as Level I, II, or III in accordance with NQA-1-1994, personnel that perform independent quality verification inspections, examinations, measurements, or tests of material, products, or activities may possess qualifications equal to or better than those required for performing the task being verified provided that the verification is within the skills of these personnel and/or is addressed by procedures. These individuals will not be responsible for the planning of quality verification inspections and tests (i.e., establishing hold points and acceptance criteria in procedures, and determining-who will be responsible for performing the inspections), evaluating inspection training programs, nor certifying inspection personnel.

- (2) A qualified engineer may be used to plan inspections, evaluate the capabilities of an inspector, or evaluate the training program for inspectors. For the purpose of these functions, a qualified engineer is one who has a baccalaureate in engineering in a discipline related to the inspection activity (such as electrical, mechanical, civil) and has a minimum of five years engineering work experience with at least two years of this experience related to nuclear facilities.
- NQA-1-1994, Supplement 2S-2
 - In lieu of Supplement 2S-2, for qualification of nondestructive examination personnel, FPL will follow the applicable standard cited in the version(s) of Section III and Section XI of the ASME Boiler and Pressure Vessel Code approved by the NRC for use at FPL sites.
- NQA-1-1994, 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 audit process, as implemented by FPL, to effectively lead an audit team, and 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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SECTION 3 DESIGN CONTROL

FPL has established and implements a process to control the design, design changes, and temporary modifications (e.g., temporary bypass lines, electrical jumpers and lifted wires, and temporary setpoints) for items that are subject to the provisions of the QAPD. The design process includes provisions to control design inputs, outputs, changes, interfaces, records, and organizational interfaces within FPL and with suppliers. 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 analyses, specifications, drawings, procedures, and instructions) so that the final design output can be related to the design input in sufficient detail to permit verification. Design change processes and the division of responsibilities for design-related activities are detailed in FPL and supplier procedures. The design control program includes interface controls necessary to control the development, verification, approval, release, status, distribution, and revision of design inputs and outputs. Design changes and disposition of nonconforming items as "use as is" or "repair" are reviewed and approved by the FPL design organization or by other organizations so authorized by FPL.

Design documents are reviewed by individuals knowledgeable in QA to ensure the documents contain the necessary QA requirements.

3.1 Design Verification

FPL design processes provide for design verification to ensure that items and activities subject to the provisions of the QAPD are suitable for their intended application, consistent with their effect on safety. Design changes are subjected to these controls, which include verification measures commensurate with those applied to original plant design.

Design verifications are performed by competent individuals or groups other than those who performed the original design but who may be from the same organization. The verifier shall not have taken part in the selection of design inputs, the selection of design considerations, or the selection of a singular design approach, as applicable. This verification may be performed by the originator's supervisor provided the supervisor did not specify a singular design approach, rule out certain design considerations, and did not establish the design inputs used in the design, or if the supervisor is the only individual in the organization competent to perform the verification. If the verification is performed by the originator's supervisor, the justification of the need is documented and approved in advance by management.

The extent of the design verification required is a function of the importance to safety of the item under consideration, the complexity of the design, the degree of standardization, the state-of-theart, and the similarity with previously proven designs. 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 item's intended use.

SECTION 3 DESIGN CONTROL (CONTINUED)

FPL normally 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 design verification is completed before relying on the item to perform its intended design or safety function.

3.2 Design Records

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.

Plant design drawings reflect the properly reviewed and approved configuration of the plant.

3.3 Computer Application and Digital Equipment Software

The QAPD governs the development, procurement, testing, maintenance, and use of computer applications and digital equipment software when used in safety-related applications and designated non-safety-related applications. FPL and suppliers are responsible for developing, approving, and issuing procedures, as necessary, to control the use of such computer applications and digital equipment software. The procedures require that the application software be assigned a proper quality classification and that the associated quality requirements be consistent with this classification. Each software application and revision thereto is documented and approved by authorized personnel. The QAPD is also applicable to the administrative functions associated with the maintenance and security of computer hardware where such functions are considered essential in order to comply with other QAPD requirements such as QA records.

3.4 Setpoint Control

Instrument and equipment setpoints that could affect nuclear safety shall be controlled in accordance with written instructions. As a minimum, these written instructions shall:

- (a) Identify responsibilities and processes for reviewing, approving, and revising setpoints and setpoint changes originally supplied by the NSSS supplier, the A/E, and the plant's technical staff.
- (b) Ensure that setpoints and setpoint changes are consistent with design and accident analysis requirements and assumptions.
- (c) Provide for documentation of setpoints, including those determined operationally.
- (d) Provide for access to necessary setpoint information by personnel who write or revise plant procedures, operate or maintain plant equipment, develop or revise design documents, or develop or revise accident analyses.

SECTION 3 DESIGN CONTROL (CONTINUED)

3.5 NQA-1-1994 Commitment

In establishing its program for design control and verification, FPL commits to compliance with NQA-1-1994, Basic Requirement 3, and Supplement 3S-1, the subsurface investigation requirements in Subpart 2.20, and the standards for computer software in Subpart 2.7.

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SECTION 4 PROCUREMENT DOCUMENT CONTROL

FPL has established the necessary measures and governing procedures to assure that purchased items and services are subject to appropriate quality and technical requirements. Procurement document changes shall be subject to the same degree of control as utilized in the preparation of the original documents. These controls include provisions such that:

- Where original technical or quality assurance requirements cannot be determined, an engineering evaluation is performed and documented by qualified staff to establish appropriate requirements and controls to assure that interfaces, interchangeability, safety, fit and function, as applicable, are not adversely affected and are not contrary to applicable regulatory requirements.
- Applicable technical, regulatory, administrative, quality and reporting requirements (such as specifications, codes, standards, tests, inspections, special processes, and 10 CFR 21) are invoked for procurement of items and services. 10 CFR 21 requirements concerning posting, evaluating, and reporting will be followed and imposed on suppliers when applicable. Applicable design bases and other requirements necessary to assure adequate quality shall be included or referenced in documents for procurement of items and services. To the extent necessary, procurement documents shall require that suppliers have a documented QA program that is determined to meet the applicable requirements of 10 CFR 50, Appendix B, as appropriate to the circumstances of procurements (or the supplier may work under FPL's approved QA program).

Reviews of procurement documents shall be performed by personnel who have access to pertinent information and who have an adequate understanding of the requirements and intent of the procurement documents.

4.1 NQA-1-1994 Commitment / Exceptions

In establishing controls for procurement, FPL commits to compliance with NQA-1-1994, Basic Requirement 4 and Supplement 4S-1, with the following clarifications and exceptions:

- NQA-1-1994, Supplement 4S-1
 - Section 2.3 of this Supplement 4S-1 includes a requirement that procurement documents require suppliers to have a documented QAP that implements NQA-1-1994, Part 1. In lieu of this requirement, FPL may require suppliers to have a documented supplier QAP that is determined to meet the applicable requirements of 10 CFR 50, Appendix B, as appropriate to the circumstances of the procurement.
 - With regard to service performed by a supplier, FPL procurement documents may---allow the supplier to work under the FPL QAP, including implementing
 procedures, in lieu of the supplier having its own QAP.

SECTION 4 PROCUREMENT DOCUMENT CONTROL (CONTINUED)

- Section 3 of supplement 4S-1 requires procurement documents to be reviewed prior to bid or award of contract. The quality assurance review of procurement documents is satisfied through review of the applicable procurement specification, including the technical and quality procurement requirements, prior to bid or award of contract. Procurement document changes (e.g., scope, technical, or quality requirements) will also receive the quality assurance review.
- Procurement documents for Commercial Grade Items that will be procured by FPL for use as safety-related items shall contain technical and quality requirements such that the procured item can be appropriately dedicated.

SECTION 5 INSTRUCTIONS, PROCEDURES, AND DRAWINGS

FPL has established the necessary measures and governing procedures to ensure that activities affecting quality are prescribed by and performed in accordance with instructions, procedures or drawings of a type appropriate to the circumstances and which, where applicable, include quantitative or qualitative acceptance criteria to implement the QAPD. Such documents are prepared and controlled according to Part II, Section 6. In addition, means are provided to disseminate to the staff instructions of both general and continuing applicability, as well as those of short-term applicability. Provisions are included for reviewing, updating, and canceling such procedures.

5.1 **Procedure Adherence**

FPL's policy is that procedures are followed, and the requirements for use of procedures have been established in administrative procedures. Where procedures cannot be followed as written, provisions are established for making changes in accordance with Part II, Section 6. Requirements are 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, 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.

In cases of emergency, personnel are authorized to depart from approved procedures when necessary to prevent injury to personnel or damage to the plant. Such departures are recorded describing the prevailing conditions and reasons for the action taken.

5.2 Procedure Content

The established measures address the applicable content of procedures as described in the introduction to Part II of NQA-1-1994. In addition, procedures governing tests, inspections, operational activities, and maintenance will include as applicable, initial conditions and prerequisites for the performance of the activity.

5.3 NQA-1-1994 Commitment

In establishing procedural controls, FPL commits to compliance with NQA-1-1994, Basic Requirement 5.

SECTION 6 DOCUMENT CONTROL

FPL has established the necessary measures and governing procedures to control the preparation of, issuance of, and changes to documents that specify quality requirements or prescribe how activities affecting quality, including organizational interfaces, are controlled to assure that correct documents are being employed. The control systems (including electronic systems used to make documents available) are documented and provide for the following:

- (a) identification of documents to be controlled and their specified distribution;
- (b) a method to identify the correct document (including revision) to be used and control of superseded documents;
- (c) identification of assignment of responsibility for preparing, reviewing, approving, and issuing documents;
- (d) review of documents for adequacy, completeness, and correctness prior to approval and issuance;
- (e) a method for providing feedback from users to continually improve procedures and work instructions; and
- (f) coordinating and controlling interface documents and procedures.

The types of documents to be controlled include:

- (a) drawings such as design, construction, installation, and as-built drawings;
- (b) engineering calculations;
- (c) design specifications;
- (d) purchase orders and related documents;
- (e) vendor-supplied documents;
- (f) audit, surveillance, and quality verification/inspection procedures;
- (g) inspection and test reports;
- (h) instructions and procedures for activities covered by the QAPD including design, construction, installation, operating (including normal and emergency operations), maintenance, calibration, and routine testing;
- (i) technical specifications; and
- (j) nonconformance reports and corrective action reports.

During the operational phase, where temporary procedures are used, they shall include a designation of the period of time during which it is acceptable to use them.

FPL Quality Assurance Program Description

SECTION 6 DOCUMENT CONTROL (CONTINUED)

6.1 Review and Approval of Documents

Documents are reviewed for adequacy by qualified persons other than the preparer. During the construction phase, procedures for design, construction, and installation are also reviewed by the organization responsible for quality verification to ensure quality assurance measures have been appropriately applied. The documented review signifies concurrence.

During the operations phase, documents affecting the configuration or operation of the station as described in the SAR are screened to identify those that require review by the IRC prior to implementation as described in Part V, Section 2.2.

To ensure effective and accurate procedures during the operational phase, applicable procedures are reviewed, and updated as necessary, based on the following conditions:

- following any modification to a system;
- following an unusual incident, such as an accident, significant operator error, or equipment malfunction;
- when procedure discrepancies are found;
- prior to use if not used in the previous two years; or
- results of QA audits conducted in accordance with Part II, Section 18.1.

Prior to issuance or use, documents including revisions thereto, are approved by the designated authority. A listing of all controlled documents identifying the current approved revision, or date, is maintained so personnel can readily determine the appropriate document for use.

6.2 Changes to Documents

Changes to documents, other than those defined in implementing procedures as minor changes, are reviewed and approved by the same organizations that performed the original review and approval unless other organizations are specifically designated. The reviewing organization has access to pertinent background data or information upon which to base their approval. Where temporary procedure changes are necessary during the operations phase, changes that clearly do not change the intent of the approved procedure may be implemented provided they are approved by two members of the staff knowledgeable in the areas affected by the procedures. Minor changes to documents, such as inconsequential editorial corrections, do not require that the revised documents receive the same review and approval as the original documents. To avoid a possible omission of a required review, the type of minor changes that do not require such a review and approval and the persons who can authorize such a classification shall be clearly delineated in implementing procedures.

6.3 NQA-1-1994 Commitment

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

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SECTION 7 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES

FPL has established the necessary measures and governing procedures to control the procurement of items and services to assure conformance with specified requirements. Such control provides for the following as appropriate: source evaluation and selection, evaluation of objective evidence of quality furnished by the supplier, source inspection, audit, and examination of items or services.

7.1 Acceptance of Item or Service

FPL establishes and implements measures to assess 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. Verifications occur at the appropriate phases of the procurement process, including, as necessary, verification of activities of suppliers below the first tier.

Measures to assure the quality of purchased items and services include the following, as applicable:

- Items are inspected, identified, and stored 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 audited on a triennial basis. In addition, if a subsequent contract or a contract modification significantly enlarges the scope of, or changes the methods or controls for, activities performed by the same supplier, an audit of the modified requirements is conducted, thus starting a new triennial period. FPL may utilize audits conducted by outside organizations for supplier qualification provided that the scope and adequacy of the audits meet FPL requirements.
- A grace period of 25 percent of the audit interval may be applied 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 45 months and not exceed 3.25 times the specified interval for any three consecutive inspections or audits.

SECTION 7 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES (CONTINUED)

- 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 (including Certified Material Test Report/Certificate). Acceptance actions/documents should be established by the Purchaser with appropriate input from the Supplier and be 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 services or items to assure they will perform satisfactorily in service in safety-related applications.
- If there is insufficient evidence of implementation of a QA program, the initial evaluation is of the existence of a QA program addressing the scope of services to be provided. The initial audit is performed after the supplier has completed sufficient work to demonstrate that its organization is implementing a QA program.

7.2 NQA-1-1994 Commitment / Exceptions

In establishing procurement verification controls, FPL commits to compliance with NQA-1-1994, Basic Requirement 7 and Supplement 7S-1, with the following clarifications and exceptions:

- NQA-1-1994, Supplement 7S-1
 - FPL considers that other 10 CFR 50 licensees, Authorized Nuclear Inspection Agencies, National Institute of Standards and Technology, or other State and Federal agencies which may provide items or services to FPL plants are not required to be evaluated or audited.
- The methodology for use of accreditation in lieu of commercial grade surveys for laboratory calibration and test services is defined in the Nuclear Energy Institute document NEI 14-05A, Revision 1, "Guidelines For the Use of Accreditation in Lieu of Commercial Grade Surveys for Procurement of Laboratory Calibration and Test Services."
 - The use of this process was approved for licensees in NRC Safety Evaluation Report (SER) dated April 1, 2016 to Union Electric Company, Callaway Plant acknowledging the process as acceptable for use by all
 holders of operation license under Title 10 of the Code of Federal
 Regulation (10 CFR) Part 50. (ADAMS Accession Number ML16089A167) and requirements for applying this methodology are defined in RIS 2016-01.

SECTION 7 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES (CONTINUED)

 The NRC SER dated February 19, 2021 concluded that NEI 14.05a, Revision 1 continues to provide an acceptable approach for licensees and suppliers subject to the QA requirements of Appendix B to 10 CFR Part 50 for using laboratory accreditation by ABs that are signatories to the ILAC MRA in lieu of performing commercial-grade surveys as part of the commercial-grade dedication process for procurement of calibration and testing services performed by domestic and international laboratories accredited by signatories to the ILAC MRA. (ADAMS Accession Number ML20322A019)

The use of an accredited laboratory is acceptable provided all of the following are met:

- (1) A documented review of the supplier's accreditation is performed and includes a verification of the following:
 - (a) The accreditation is to ANSI/ISO/IEC 17025:20172005, (or ANSI/ISO/IEC 17025:2017), "General Requirements for the Competence of Testing and Calibration Laboratories."
 - (b) The accrediting body is recognized by the ILAC (International Laboratory Accreditation Corporation) via a MRA (Mutual Recognition Agreement).
 - (c) For procurement of calibration services, the published scope of accreditation for the calibration laboratory covers the needed measurement parameters, ranges, and uncertainties.
 - (d) For procurement of testing services, the published scope of accreditation for the test laboratory covers the needed testing services including test methodology and tolerances/uncertainty.
 - (e) The laboratory has achieved accreditation based on an on-site accreditation assessment by the selected AB within the past 48 months. The laboratory's accreditation cannot be based on two consecutive remote accreditation assessments.
- (2) The purchase documents require that:
 - (a) The service must be provided in accordance with their accredited ISO/IEC-17025:2017 program and scope of accreditation.
 - (b) As found calibration data must be reported in the certificate of calibration when calibrated items are found to be out-of-tolerance (for calibration services only).

SECTION 7 CONTROL OF PURCHASED MATERIAL, EQUIPMENT, AND SERVICES (CONTINUED)

- (c) The equipment/standards used to perform the calibration must be identified in the certificate of calibration (for calibration services only).
- (d) Subcontracting of these accredited services is prohibited.
- (e) The customer must be notified of any condition that adversely impacts the laboratory's ability to maintain the scope of accreditation.
- (f) Performance of the services listed on this order is contingent on the laboratory's accreditation having been achieved through an on-site accreditation assessment by the AB within the past 48 months.
- (g) Additional technical and quality requirements, as necessary, based upon a review of the procured scope of services, which may include, but are not necessarily limited to, tolerances, accuracies, ranges, and industry standards.
- (3) It is validated, at receipt inspection, that the laboratory's documentation certifies that:
 - (a) The contracted calibration or test service has been performed in accordance with their ISO / IEC-17025:2005 (or ISO/IEC-17025:2017) program, and has been performed within their scope of accreditation, and
 - (b) The purchase order's requirements are met.
 - For Section 8.1, FPL considers documents that may be stored in approved electronic media under FPL or vendor control, not physically located on the plant site, but are accessible from the respective nuclear facility site as meeting the NQA-1 requirement for documents to be available at the site. Following completion of the construction period, sufficient as-built documentation will be turned over to FPL to support operations. The FPL records management system will provide for timely retrieval of necessary records.
 - For supplement 4S-1 and Supplement 7S-1, the guidance contained in EPRI 3002002982 and Regulatory Guide 1.164 to procure Commercial Grade Items will be used in lieu of these requirements.

FPL Quality Assurance Program Description

- For commercial grade items, special quality verification requirements are established and described in FPL documents to provide the necessary assurance an item will perform satisfactorily in service. The FPL documents address determining the critical characteristics that ensure an item is suitable for its intended use, technical evaluation of the item, receipt requirements, and quality evaluation of the item.
- FPL will also use other appropriate approved regulatory means and controls to support FPL commercial grade dedication activities. One example of this is Electric Power Research Institute (EPRI) Topical Report TR-106439, "Guideline on Evaluation and Acceptance of Commercial Grade Digital Equipment for Nuclear Safety Applications," dated July 17, 1997. FPL will assume 10 CFR 21 reporting responsibility for all items that FPL dedicates as safety-related.

FPL Quality Assurance Program Description

SECTION 8 IDENTIFICATION AND CONTROL OF MATERIALS, PARTS, AND COMPONENTS

FPL has established the necessary measures and governing procedures to identify and control 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.

8.1 NQA-1-1994 Commitment

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

SECTION 9 CONTROL OF SPECIAL PROCESSES

FPL has established the necessary measures and governing procedures to assure that special processes that require interim process controls to assure quality, such as welding, heat treating, and nondestructive examination, are controlled. These provisions include assuring that special processes are accomplished by qualified personnel using qualified procedures and equipment. Personnel are qualified and 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.

9.1 NQA-1-1994 Commitment

In establishing measures for the control of special processes, FPL commits to compliance with NQA-1-1994, Basic Requirement 9 and Supplement 9S-1.

SECTION 10 INSPECTION

FPL has established the necessary measures and governing procedures to implement inspections that assure items, services, and activities affecting safety meet established requirements and conform to applicable documented specifications, instructions, procedures, and design documents. Inspection may also be applied to items, services, and activities affecting plant reliability and integrity. Types of inspections may include those verifications related to procurement, such as source, in-process, final, and receipt inspection, as well as construction, installation, and operations activities. Inspections are carried out by properly qualified persons independent of those who performed or directly supervised the work. Inspection results are documented.

10.1 Inspection Program

The inspection program establishes inspections (including surveillance of processes), as necessary to verify quality: (1) at the source of supplied items or services, (2) in-process during fabrication at a supplier's facility or at a Company facility, (3) for final acceptance of fabricated and/or installed items during construction, (4) upon receipt of items for a facility, as well as (5) during maintenance, modification, in-service, and operating activities.

The inspection program establishes requirements for planning inspections, such as the group or discipline responsible for performing the inspection, where inspection hold points are to be applied, determining applicable acceptance criteria, the frequency of inspection to be applied, and identification of special tools needed to perform the inspection. Inspection planning is performed by personnel qualified in the discipline related to the inspection and includes qualified inspectors or engineers. Inspection plans are based on, as a minimum, the importance of the item to the safety of the facility, the complexity of the item, technical requirements to be met, and design specifications. Where significant changes in inspection activities for the facilities are to occur, management responsible for the inspection programs evaluate the resource and planning requirements to ensure effective implementation of the inspection program.

Inspection program documents establish requirements for performing the planned inspections, and documenting required inspection information such as rejection, acceptance, and reinspection results, and the person(s) performing the inspection.

Inspection results are documented by the inspector, reviewed by authorized personnel qualified to evaluate the technical adequacy of the inspection results, and controlled by instructions, procedures, and drawings.

10.2 Inspector Qualification

FPL has established qualification programs for personnel performing quality inspections. The qualification program-requirements are described in Part II, Section 2. These qualification programs are applied to individuals performing quality inspections regardless of the functional group where they are assigned.

SECTION 10 INSPECTION (CONTINUED)

10.3 NQA-1-1994 Commitment / Exceptions

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

- Subpart 2.4 commits FPL to IEEE 336-1985. IEEE 336-1985 refers to IEEE 498-1985. Both IEEE 336 -1985 and IEEE 498-1985 use the definition of "Safety Systems Equipment" from IEEE 603-1980. FPL commits to the definition of Safety Systems Equipment in IEEE 603- 1980, but does not commit to the balance of that standard. This definition is only applicable to equipment in the context of Subpart 2.4.
- An additional exception to Subpart 2.4 is addressed in Part II, Section 12 of the QAPD.
- Where inspections at the operating facility are performed by persons within the same organization (e.g., Maintenance group), FPL takes exception to the requirements of NQA-1-1994, Supplement 10S-1, Section 3.1, the inspectors report to the quality control management while performing those inspections.

SECTION 11 TEST CONTROL

FPL has established the necessary measures and governing procedures to demonstrate that items subject to the provisions of the QAPD 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, postmodification tests, in-service 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. Programs also include provisions to establish and adjust test schedules, and to maintain 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 a responsible authority to assure that the test requirements have been satisfied. If acceptance criteria are not met, re-testing is performed as needed to confirm acceptability following correction of the system or equipment deficiencies that caused the failure.

The initial start-up test program is planned and scheduled to permit safe fuel loading and startup; to increase power in safe increments; and to perform major testing at specified power levels. If tests require the variation of operating parameters outside of their normal range, the limits within which such variation is permitted will be prescribed. The scope of the testing demonstrates, insofar as practicable, that the plant is capable of withstanding the design transients and accidents. For new facility construction, the suitability of facility operating procedures is checked to the maximum extent possible during the pre-operational and initial start-up test programs.

Tests are performed and results documented in accordance with applicable technical and regulatory requirements, including those described in the Technical Specifications and SAR. Test programs ensure appropriate retention of test data in accordance with the records requirements of the QAPD. Personnel that perform or evaluate tests are qualified in accordance with the requirements established in Part II, Section 2.

11.1 NQA-1-1994 Commitment

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

11.2 NQA-1-1994 Commitment for Computer Program Testing

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.

SECTION 12 CONTROL OF MEASURING AND TEST EQUIPMENT

FPL has established the necessary measures and governing procedures to control the calibration, maintenance, and use of measuring and test equipment (M&TE) that provides information important to safe plant operation. The provisions of such procedures cover equipment such as indicating and actuating instruments and gages, tools, reference and transfer standards, and nondestructive examination equipment. The suppliers of commercial-grade calibration services are controlled as described in Part II, Section 7.

12.1 Installed Instrument and Control Devices

For the operations phase of the facilities, FPL has established and implements procedures for the calibration and adjustment of instrument and control devices installed in the facility. The calibration and adjustment of these devices is accomplished through the facility maintenance programs to ensure the facility is operated within design and technical requirements. Appropriate documentation will be maintained for these devices to indicate the control status, when the next calibration is due, and identify any limitations on use of the device.

12.2 NQA-1-1994 Commitment / Exceptions

In establishing provisions for control of measuring and test equipment, FPL commits to compliance with NQA-1-1994, Basic Requirement 12 and Supplement 12S-1 with the following clarification and exception:

- The out of calibration conditions described in paragraph 3.2 of Supplement 12S-1 refers to when the M&TE is found out of the required accuracy limits (i.e., out of tolerance) during calibration.
- Measuring and test equipment are not required to be marked with the calibration status where it is impossible or impractical due to equipment size or configuration (such as the label will interfere with operation of the device) provided the required information is maintained in suitable documentation traceable to the device. This exception also applies to the calibration labeling requirement stated in NQA-1-1994, Subpart 2.4, Section 7.2.1 (ANSI/IEEE Std. 336-1985).

SECTION 13 HANDLING, STORAGE, AND SHIPPING

FPL has established the necessary measures and governing procedures to control handling, storage, packaging, shipping, cleaning, and preservation of items to prevent inadvertent damage or loss, and to minimize deterioration. These provisions include specific procedures, when required to maintain acceptable quality of the items important to the safe operations of the plant. 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.

Special or additional handling, storage, shipping, cleaning and preservation requirements are identified and implemented as specified in procurement documents and applicable procedures. Where special requirements are specified, the items and containers (where used) are suitably marked.

Special handling tools and equipment are used and controlled as necessary to ensure safe and adequate handling. Special handling tools and equipment are inspected and tested at specified time intervals and in accordance with procedures to verify that the tools and equipment are adequately maintained.

Operators of special handling and lifting equipment are experienced or trained in the use the equipment. During the operational phase, 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. Where required, FPL complies with applicable hoisting, rigging and transportation regulations and codes.

13.1 Housekeeping

Housekeeping practices 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 help assure that only proper materials, equipment, processes and procedures are used and that the quality of items is not degraded. 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.
SECTION 13 HANDLING, STORAGE, AND SHIPPING (CONTINUED)

13.2 NQA-1-1994 Commitment / Exceptions

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, during the construction and pre-operational phase of the plant, to compliance with the requirements of NQA-1-1994, Subpart 2.1, Subpart 2.2, and Subpart 3.2, Appendix 2.1, with the following clarifications and exceptions:

NQA-1-1994, Subpart 2.1

- Subpart 2.1, Section 3.1 and 3.2 establish criteria for classifying items into cleanness classes and requirements for each class. Instead of using the cleanness level system of Subpart 2.1, FPL may establish cleanness 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 material prior to system closure.

NQA-1-1994, Subpart 2.2

- Subpart 2.2, Section 2.2 establishes criteria for classifying items into protection levels. Instead of classifying items into protection levels during the operational phase, FPL 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 6.6, "Storage Records:" This section requires written records be
 prepared containing information on personnel access. As an alternative to this
 requirement, FPL documents establish controls for storage areas that describe those
 authorized to access areas and the requirements for recording access of personnel.
 However, these records of access are not considered quality records and will be retained
 in accordance with the administrative controls of the applicable plant.
- 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 the nuclear power plants during construction.

SECTION 13 HANDLING, STORAGE, AND SHIPPING (CONTINUED)

NQA-1-1994, Subpart 2.3

Subpart 2.3, Section 2.3 requires the establishment of five zone designations for housekeeping cleanliness controls. Instead of the five-level zone designation, FPL bases its control over housekeeping activities on a consideration of what is necessary and appropriate for the activity involved. The controls are implemented through procedures or instructions which, 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.

NQA-1-1994, Subpart 3.2

Subpart 3.2, Appendix 2.1: Only Section 3 precautions are being committed to in accordance with RG 1.37. In addition, a suitable chloride stress-cracking inhibitor should be added to the fresh water used to flush systems containing austenitic stainless steels.

SECTION 14 INSPECTION, TEST, AND OPERATING STATUS

FPL has established the necessary measures and governing procedures to identify the inspection, test, and operating status of items and components subject to the provisions of the QAPD in order to maintain personnel and reactor safety and avoid inadvertent 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.

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

Administrative procedures also describe the measures taken to control altering the sequence of required tests, inspections, and other operations. Review and approval for these actions is subject to the same control as taken during the original review and approval of tests, inspections, and other operations.

14.1 NQA-1-1994 Commitment

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

SECTION 15 NONCONFORMING SERVICES, MATERIALS, PARTS, OR COMPONENTS

FPL has established the necessary measures and governing procedures to control items, including services, that do not conform to specified requirements to prevent inadvertent installation or use. Controls provide for identification, documentation, evaluation, segregation when practical, and disposition of nonconforming items, and for notification to affected organizations. Controls are provided to address conditional release of nonconforming items for use on an at-risk basis prior to resolution and disposition of the nonconformance, including maintaining identification of the item and documenting the basis for such release. Conditional release of nonconforming items for installation requires the approval of the designated management. Non-conformances are corrected or resolved prior to depending on the item to perform its intended safety function. Non-conformances are evaluated for impact on operability of quality structures, systems, and components to assure that the final condition does not adversely affect safety, operation, or maintenance of the item or service. Non-conformances to design requirements dispositioned as repair or use-as-is are subject to design control measures commensurate with those applied to the original design. Nonconformance dispositions are reviewed for adequacy, analysis of quality trends, and reports provided to the designated management. Significant trends are reported to management in accordance with FPL procedures, regulatory requirements, and industry standards.

15.1 Reporting Program

FPL has the necessary measures and governing procedures that implement a reporting program that conforms to the requirements of 10 CFR 52, 10 CFR 50.55 and 10 CFR 21 during design and construction and 10 CFR 21 during operations.

15.2 NQA-1-1994 Commitment

In establishing measures for nonconforming materials, parts, or components, FPL commits to compliance with NQA-1-1994, Basic Requirement 15, and Supplement 15S-1.

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SECTION 16 CORRECTIVE ACTION

FPL has established the necessary measures and governing procedures to promptly identify, control, document, classify and correct conditions adverse to quality. FPL procedures assure that corrective actions are documented and initiated following the determination of conditions adverse to quality in accordance with regulatory requirements and applicable quality standards. FPL procedures require personnel to identify known conditions adverse to quality. When complex issues arise where it cannot be readily determined if a condition adverse to quality exists, FPL documents establish the requirements for documentation and timely evaluation of the issue. Reports 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. In the case of a significant condition adverse to quality, the cause is determined and actions to preclude recurrence are taken.

In the case of suppliers working on safety-related activities, or other similar situations, FPL may delegate specific responsibilities of the Corrective Action program but FPL maintains responsibility for the program's effectiveness.

16.1 Reporting Program

FPL has the necessary measures and governing procedures that implement a reporting program that conforms to the requirements of 10 CFR 52, 10 CFR 50.55 and/or 10 CFR 21 during design and construction, and 10 CFR 21 during operations.

16.2 NQA-1-1994 Commitment

In establishing provisions for corrective action, FPL commits to compliance with NQA-1-1994, Basic Requirement 16.

SECTION 17 QUALITY ASSURANCE RECORDS

FPL has the necessary measures and governing procedures to ensure that sufficient records of items and activities affecting quality are developed, reviewed, approved, issued, used, and revised to reflect completed work. The provisions of such procedures establish the scope of the records retention program for FPL and include requirements for records administration, including receipt, preservation, retention, storage, safekeeping, retrieval, access controls, user privileges, and final disposition.

17.1 Record Retention

Measures are established that ensure that sufficient records of completed items and activities affecting quality are appropriately stored. Records of activities for design, engineering, procurement, manufacturing, construction, inspection and test, installation, pre-operation, startup, operations, maintenance, modification, decommissioning, and audits and their retention times are defined in appropriate procedures. The records and retention times are based on Regulatory Position C.2 and Table 1, of Regulatory Guide 1.28, Revision 3 for design, construction, and initial start-up. Retention times for operations phase records are based on construction records that are similar in nature.

17.2 Electronic Records

When using optical discs for electronic records storage and retrieval systems, FPL complies with the NRC guidance in Generic Letter 88-18, "Plant Record Storage on Optical Disks." FPL will manage the storage of QA Records in electronic media consistent with the intent of RIS 2000-18 and associated NIRMA Guidelines TG 11-2011, TG 15-2011, TG 16-2011, and TG 21-2011.

17.3 NQA-1-1994 Commitment / Exceptions

In establishing provisions for records, FPL commits to compliance with NQA-1-1994, Basic Requirement 17 and Supplement 17S-1 as well as the applicable portions of 10 CFR 73 established via 10 CFR 73.55 (q) and 10 CFR 73.70, with the following clarifications and exceptions:

- NQA-1-1994, Supplement 17S-1
 - 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, 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.

SECTION 18 AUDITS

FPL has established the necessary measures and governing procedures to implement audits to verify that activities covered by the QAPD are performed in conformance with the requirements established. The audit programs are themselves reviewed for effectiveness as a part of the overall audit process.

18.1 Performance of Audits

Internal audits of selected aspects of licensing, design, construction phase and operating activities are performed with a frequency commensurate with safety significance and in a manner which assures that audits of safety-related activities are completed. During the early portions of NNP activities, audits will focus on areas including, but not limited to, procurement, and corrective action. Functional areas of an organization's QA program for auditing include, at a minimum, verification of compliance and effectiveness of implementation of internal rules, procedures (e.g., operating, design, procurement, maintenance, modification, refueling, surveillance, test, security, radiation control procedures, and the emergency plan), Technical Specifications, regulations and license conditions, programs for training, retraining, qualification and performance of operating staff, corrective actions, and observation of performance of operating, refueling, maintenance and modification activities, including associated record keeping.

The audits are scheduled on a formal preplanned audit schedule. The audit system is reviewed periodically and revised as necessary to assure coverage commensurate with current and planned activities. Additional audits may be performed as deemed necessary by management. The scope of the audit is determined by the quality status and safety importance of the activities being performed. These audits are conducted by trained personnel not having direct responsibilities in the area being audited and in accordance with preplanned and approved audit plans or checklists, under the direction of a qualified lead auditor and the cognizance of the Quality Manager responsible for the day to day program as documented in Section 1.

FPL is responsible for conducting periodic internal and external audits. Internal audits are conducted to determine the adequacy of programs and procedures (by representative sampling), and to determine if they are meaningful and comply with the overall QAPD. External audits determine the adequacy of supplier and contractor quality assurance programs.

The results of each audit are reported in writing to the responsible Senior Executive responsible for the Quality Assurance program at the Site, or designee, as appropriate. Additional internal distribution is made to other concerned management levels in accordance with approved procedures.

Audits of suppliers of safety-related components and/or services are conducted as described in Section 7.1.

SECTION 18 AUDITS (CONTINUED)

18.2 Internal Audits

Internal audits of organization and facility activities, conducted prior to placing the facility in operation, should be performed in such a manner as to assure that an audit of all applicable QA program elements is completed for each functional area at least once each year or at least once during the life of the activity, whichever is shorter.

Internal audits of activities, conducted after placing the facility in operation, should be performed in such a manner as to assure that an audit of all applicable QA program elements is completed for each functional area within a period of two years. Internal audit frequencies of well established activities, conducted after placing the facility in operation, may be extended one year at a time beyond the above two-year interval based on the results of an annual evaluation of the applicable functional area and objective evidence that the functional area activities are being satisfactorily accomplished. The evaluation should include a detailed performance analysis of the functional area based upon applicable internal and external source data and due consideration of the impact of any functional area changes in responsibility, resources or management. However, the internal audit frequency interval should not exceed a maximum of four years. If an adverse trend is identified in the applicable functional area, the extension of the internal audit frequency interval should be rescinded and an audit scheduled as soon as practicable.

During the operations phase, audits are performed at a frequency commensurate with the safety significance of the activities and in such a manner to assure audits of all applicable QA program elements are completed within a period of two years. These audits will include, as a minimum, activities in the following areas:

- 1. The conformance of facility operation to provisions contained within the Technical Specifications and applicable license conditions including administrative controls.
- 2. The performance, training, and qualifications of the facility staff.
- 3. The performance of activities required by the QAPD to meet the criteria of 10 CFR 50, Appendix B.
- 4. The Fire Protection Program and implementing procedures. A fire protection equipment and program implementation inspection and audit are conducted utilizing either a qualified off-site licensed fire protection engineer or an outside qualified fire protection consultant.
- 5. Other activities and documents considered appropriate by the Chief Nuclear Officer.

Audits may also be used to meet the periodic review requirements for Security, Emergency Preparedness, and Radiological Protection programs within the provisions of the applicable regulation.

SECTION 18 AUDITS (CONTINUED)

Internal audits include verification of compliance and effectiveness of the administrative controls established for implementing the requirements of the QAPD; regulations and license provisions; provisions for training, retraining, qualification, and performance of personnel performing activities covered by the QAPD; corrective actions taken following abnormal occurrences; and, observation of the performance of construction, fabrication, operating, refueling, maintenance, and modification activities including associated record keeping.

18.3 NQA-1-1994 Commitment

In establishing the independent audit program, FPL commits to compliance with NQA-1-1994, Basic Requirement 18 and Supplement 18S-1.

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PART III NON-SAFETY-RELATED SSC QUALITY CONTROL

SECTION 1 NON-SAFETY RELATED SSCs - SIGNIFICANT CONTRIBUTORS TO PLANT SAFETY

Specific program controls are applied to non-safety-related SSCs, for which 10 CFR 50, Appendix B is not applicable, that are significant contributors to plant safety. The specific program controls consistent with applicable sections of the QAPD are applied to those items in a selected manner, targeted at those characteristics or critical attributes that render the SSC a significant contributor to plant safety.

The following clarify the applicability of the QA Program to the non-safety-related SSCs and related activities, including the identification of exceptions to the QA Program described in Part II, Sections 1 through 18 taken for non-safety-related SSCs.

1.1 Organization

The verification activities described in this part may be performed by the FPL line organization. The QA organization described in Part II is not required to perform these functions.

1.2 QA Program

FPL QA requirements for non-safety-related SSCs are established in the QAPD and appropriate procedures. Suppliers of these SSCs or related services describe the quality controls applied in appropriate procedures. A new or separate QA program is not required.

1.3 Design Control

FPL has design control measures to ensure that the contractually established design requirements are included in the design. These measures ensure that applicable design inputs are included or correctly translated into the design documents, and deviations from those requirements are controlled. Design verification is provided through the normal supervisory review of the designer's work.

1.4 Procurement Document Control

Procurement documents for items and services obtained by or for FPL include or reference documents describing applicable design bases, design requirements, and other requirements necessary to ensure component performance. The procurement documents are controlled to address deviations from the specified requirements.

SECTION 1 NON-SAFETY RELATED SSCs - SIGNIFICANT CONTRIBUTORS TO PLANT SAFETY (CONTINUED)

1.5 Instructions, Procedures, and Drawings

FPL provides documents such as, but not limited to, written instructions, plant procedures, drawings, vendor technical manuals, and special instructions in work orders, to direct the performance of activities affecting quality. The method of instruction employed provides an appropriate degree of guidance to the personnel performing the activity to achieve acceptable functional performance of the SSC.

1.6 Document Control

FPL controls the issuance and change of documents that specify quality requirements or prescribe activities affecting quality to ensure that correct documents are used. These controls include review and approval of documents, identification of the appropriate revision for use, and measures to preclude the use of superseded or obsolete documents.

1.7 Control of Purchased Items and Services

FPL employs measures, such as inspection of items or documents upon receipt or acceptance testing, to ensure that all purchased items and services conform to appropriate procurement documents.

1.8 Identification and Control of Purchased Items

FPL employs measures where necessary, to identify purchased items and preserve their functional performance capability. Storage controls take into account appropriate environmental, maintenance, or shelf life restrictions for the items.

1.9 Control of Special Processes

FPL employs process and procedure controls for special processes, including welding, heat treating, and nondestructive testing. These controls are based on applicable codes, standards, specifications, criteria, or other special requirements for the special process.

1.10 Inspection

FPL uses documented instructions to ensure necessary inspections are performed to verify conformance of an item or activity to specified requirements or to verify that activities are satisfactorily accomplished. These inspections are performed by knowledgeable personnel who may be in the same line organization as those performing the activity being inspected.

SECTION 1 NON-SAFETY RELATED SSCs - SIGNIFICANT CONTRIBUTORS TO PLANT SAFETY (CONTINUED)

1.11 Test Control

FPL employs measures to identify required testing that demonstrates that equipment conforms to design requirements. These tests are performed in accordance with test instructions or procedures. The test results are recorded, and authorized individuals evaluate the results to ensure that test requirements are met.

1.12 Control of Measuring and Test Equipment (M&TE)

FPL employs measures to control M&TE use, and calibration and adjustment at specific intervals or prior to use.

1.13 Handling, Storage, and Shipping

FPL employs measures to control the handling, storage, cleaning, packaging, shipping, and preservation of items to prevent damage or loss and to minimize deterioration. These measures include appropriate marking or labels, and identification of any special storage or handling requirements.

1.14 Inspection, Test, and Operating Status

FPL employs measures to identify items that have satisfactorily passed required tests and inspections and to indicate the status of inspection, test, and operability as appropriate.

1.15 Control of Nonconforming Items

FPL employs measures to identify and control items that do not conform to specified requirements to prevent their inadvertent installation or use.

1.16 Corrective Action

FPL employs measures to ensure that failures, malfunctions, deficiencies, deviations, defective components, and non-conformances are properly identified, reported, and corrected.

1.17 Records

FPL employs measures to ensure records are prepared and maintained to furnish evidence that the above requirements for design, procurement, document control, inspection, and test activities have been met.

SECTION 1 NON-SAFETY RELATED SSCs - SIGNIFICANT CONTRIBUTORS TO PLANT SAFETY (CONTINUED)

1.18 Audits

FPL employs measures for line management to periodically review and document the adequacy of the process, including taking any necessary corrective action. Audits independent of line management are not required. Line management is responsible for determining whether reviews conducted by line management or audits conducted by any organization independent of line management are appropriate. If performed, audits are conducted and documented to verify compliance with design and procurement documents, instructions, procedures, drawings, and inspection and test activities. Where the measures of this part (Part III) are implemented by the same programs, processes, or procedures as the comparable activities of Part II, the audits performed under the provisions of Part II may be used to satisfy the review requirements of this Section (Part III, Section 1.18).

SECTION 2 NON-SAFETY RELATED SSCs CREDITED FOR REGULATORY EVENTS

The following criteria apply to fire protection (10 CFR 50.48), anticipated transients without scram (ATWS) (10 CFR 50.62), the station blackout (SBO) (10 CFR 50.63) SSCs that are not safety-related;

- FPL implements quality requirements for the fire protection system in accordance with Regulatory Position 1.7, "Quality Assurance," in Regulatory Guide 1.189, "Fire Protection for Operating Nuclear Power Plants."
- FPL implements the quality requirements for ATWS equipment in accordance with Generic Letter 85-06, "Quality Assurance Guidance for ATWS Equipment That Is Not Safety Related."
- FPL implements quality requirements for SBO equipment in accordance with Regulatory Position 3.5, "Quality Assurance and Specific Guidance for SBO Equipment That Is Not Safety Related," and Appendix A, "Quality Assurance Guidance for Non-Safety Systems and Equipment," in Regulatory Guide 1.155, "Station Blackout."

PART IV REGULATORY COMMITMENTS

NRC REGULATORY GUIDES AND QUALITY ASSURANCE STANDARDS

This section identifies the NRC Regulatory Guides and the other quality assurance standards which have been selected to supplement and support the FPL QAPD.

See FSAR Chapter 1 for the FPL evaluation of conformance with the guidance in NRC Regulatory Guides in effect six months prior to the submittal date of the application.

REGULATORY GUIDES

<u>Regulatory Guide 1.8</u>, Rev. 3, May 2000, Qualification and Training of Personnel for Nuclear Power Plants

Regulatory Guide 1.8 provides guidance that is acceptable to the NRC staff regarding qualifications and training for nuclear power plant personnel.

FPL identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 1.

Regulatory Guide 1.26, Revision 4, March 2007 - Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants Regulatory Guide 1.26 defines classification of systems and components.

FPL identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 1.

<u>**Regulatory Guide 1.28**</u>, Rev. 3, August 1985, Quality Assurance Program Requirements (Design and Construction)

Regulatory Guide 1.28 describes a method acceptable to the NRC staff for complying with the provisions of Appendix B with regard to establishing and implementing the requisite quality assurance program for the design and construction of nuclear power plants.

FPL identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 1.

Regulatory Guide 1.29, Revision 4, March 2007 - Seismic Design Classification

Regulatory Guide 1.29 defines systems required to withstand a safe shutdown earthquake (SSE).

FPL identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 1.

NRC REGULATORY GUIDES AND QUALITY ASSURANCE STANDARDS (CONTINUED)

<u>Regulatory Guide 1.33</u>, Revision 2, February 1978, Quality Assurance Program Requirements (Operations)

Regulatory Guide 1.33 describes a method acceptable to the NRC staff for complying with the Commission's regulations with regard to overall quality assurance program requirements for the operation phase of nuclear power plants.

FPL identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 1.

<u>Regulatory Guide 1.37</u>, Revision 1, March 2007 – Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water-Cooled Nuclear Power Plants

Regulatory Guide 1.37 provides guidance on specifying water quality and precautions related to the use of alkaline cleaning solutions and chelating agents.

FPL identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 1.

<u>Regulatory Guide 1.54</u>, Revision 1, July 2000 - Service Level I, II, and III Protective Coatings Applied to Nuclear Power Plants

Regulatory Guide 1.54 provide guidance for the application of protective coatings within nuclear power plants to protect surfaces from corrosion, contamination from radionuclides, and for wear protection.

FPL identifies conformance and exceptions for the applicable regulatory position guidance provided in this regulatory guide in FSAR Chapter 1.

For plants with an NFPA 805 fire protection licensing bases, NextEra Energy commits to implement Regulatory Guide 1.205, December 2009, Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants, which endorses in part, NEI 04-02, Revision 2, Nuclear Energy Institute Guidance for Implementing a Risk-Informed, Performance-Based Fire Protection Program under 10 CFR 50.48(c). The implementation of these documents is described in the station specific Technical Specifications and License Conditions and station specific NRC approved Safety Evaluation Reports.

NRC REGULATORY GUIDES AND QUALITY ASSURANCE STANDARDS (CONTINUED)

STANDARDS

ASME NQA-1-1994 Edition - Quality Assurance Requirements for Nuclear Facility Applications

FPL commits to NQA-1-1994, Parts I, II, and III, as described in the foregoing sections of this document.

Nuclear Information and Records Management Association, Inc. (NIRMA) Technical Guides (TGs)

FPL commits to NIRMA TGs as described in Part II, Section 17.

PART V ADDITIONAL QUALITY ASSURANCE AND ADMINISTRATIVE CONTROLS FOR THE PLANT OPERATIONAL PHASE

FPL includes the requirements of Part V to establish the necessary measures and governing procedures for the operations phase of the plant.

SECTION 1 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-1-1994 and the other standards to which the QAPD commits. In addition, definitions are provided for the following terms not covered in NQA-1-1994:

administrative controls: rules, orders, instructions, procedures, policies, practices and designations of authority and responsibility

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

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

nuclear power plant: any plant using a nuclear reactor to produce electric power, process steam or space heating

on-site operating organization: on-site personnel concerned with the operation, maintenance and certain technical services

operating activities: work functions associated with normal operation and maintenance of the plant, and technical services routinely assigned to the on-site operating organization

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

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

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

SECTION 2 REVIEW OF ACTIVITIES AFFECTING SAFE PLANT OPERATION

2.1 Onsite Operating Organization Review

The FPL onsite organization employs reviews, both periodic and as situations demand, to evaluate plant operations and plan future activities. The important elements of the reviews are documented and subjects of potential concern for the independent review described below are brought to the attention of the Plant Manager. The reviews are part of the normal duties of plant supervisory personnel in order to provide timely and continuing monitoring of operating activities in order to assist the Plant Manager in keeping abreast of general plant conditions and to verify that day-to-day operations are conducted safely in accordance with the established administrative controls. The Plant Manager ensures the timely referral of the applicable matters discussed in the reviews to appropriate management and independent reviewers.

2.2 Independent Review

Activities occurring during the operational phase shall be independently reviewed on a periodic basis. The independent review program shall be functional prior to initial core loading. The independent review function performs the following:

- a. Reviews proposed changes to the facility as described in the safety analysis report (SAR). The Independent Review Committee (IRC) also verifies that changes do not adversely affect safety and if a technical specification change or NRC review is required.
- b. Reviews proposed tests and experiments not described in the SAR prior to implementation. Verifies the determination of whether changes to proposed tests and experiments not described in the SAR require a technical specification change or license amendment.
- c. Reviews proposed technical specification changes and license amendments relating to nuclear safety prior to NRC submittal and implementation, except in those cases where the change is identical to a previously approved change.
- d. Reviews violations, deviations, and events that are required to be reported to the NRC. This review includes the results of investigations and recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.
- e. Reviews any matter related to nuclear safety that is requested by the Site Vice President
- f. Reviews corrective actions for significant conditions adverse to quality.
- g. Reviews internal audit reports.
- h. Reviews the adequacy of the internal audit program every 24 months.

SECTION 2 REVIEW OF ACTIVITIES AFFECTING SAFE PLANT OPERATION (CONTINUED)

Independent Review Committee

- 1. An independent review committee is assigned independent review responsibilities.
- 2. The independent review committee reports to the Site Vice President
- 3. The independent review committee is composed of no less than 5 persons and no more than a minority of members are from the on-site operating organization.
- For example, at least 3 of the 5 members must be from off-site if there are 5 members on the committee. A minimum of the chairman or alternative chairman and 2 members must be present for all meetings.
- 4. During the period of initial operation, meetings are conducted no less frequently than once per calendar quarter. Afterwards meetings are conduced no less than twice a year.
- 5. Results of the meeting are documented and recorded.
- 6. Consultants and contractors are used for the review of complex problems beyond the expertise of the off site/on site independent review committee.
- 7. Persons on the independent review committee are qualified as follows:
 - a. Supervisor or Chairman of the Independent Review Committee
 - Education: baccalaureate in engineering or related science
 - Minimum experience: 6 years combined managerial and technical support
 - b. Independent Review Committee Members

Education: Baccalaureate in engineering or related science for those Independent review personnel who are required to review problems in:

- nuclear power plant operations,
- nuclear engineering,
- chemistry and radiochemistry,
- metallurgy,
- nondestructive testing,
- instrumentation and control, -
- radiological safety,
- mechanical engineering, and electrical engineering.

SECTION 2 REVIEW OF ACTIVITIES AFFECTING SAFE PLANT OPERATION (CONTINUED)

High school diploma for those independent review personnel who are required to review problems in administrative control and quality assurance practices, training, and emergency plans and related procedures and equipment.

Minimum experience: 5 years experience in their own area of responsibility (nuclear power plant operations, nuclear engineering, chemistry and radiochemistry, metallurgy, nondestructive testing, instrumentation and control, radiological safety, mechanical engineering, and electrical engineering, administrative control and quality assurance practices, training, and emergency plans and related procedures and equipment).

An independent assessment includes an 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. Nuclear 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 Nuclear Assessment management and by management having responsibility for the area assessed. In addition, Nuclear Assurance activities are periodically assessed for effectiveness. Results are documented and reported to responsible management.

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

Independent Assessments are performed on a fixed frequency.

Independent Assessments of the topics in Table 1 are audited at least triennially. A grace period of 25 percent of the audit interval may be applied to these non-regulatory topics in executing 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 45 months. Certain activities, as identified in Table 2, receive independent assessments at frequencies established by related NRC rules. A grace period shall not be applied to these regulatory topics unless permitted by the NRC rule.

An evaluation will be performed once per calendar year to determine the need for additional audit activities. When determined necessary, an additional audit activity will be performed within a time frame established by the evaluation.

SECTION 2 REVIEW OF ACTIVITIES AFFECTING SAFE PLANT OPERATION (CONTINUED)

 Table 1

 Topics Subject to Independent Assessment with QATR Defined Frequency

Topic1
Chemistry, Effluents & Environmental Monitoring
Engineering
Maintenance / Work Management
Nuclear Assurance
Operations
Performance Improvement
Procurement & Nuclear Materials Management
QA Programs
Radiological Protection & Radwaste
Training

Table 2

Topics Subject to Independent Assessment with Regulatory Defined Frequency

Topic1
Cyber Security
Emergency Planning
Fire Protection
Fitness For Duty and Access Authorization
Independent Spent Fuel Storage
Security

1. Topic titles in these tables may vary; however, all program elements (i.e. applicable regulatory requirements and all 10 CFR 50 Appendix B criteria) will be covered as identified in implementing procedures.

SECTION 3 OPERATIONAL PHASE PROCEDURES

The following is a description of the various types of procedures used by FPL to govern the design, operation, and maintenance of its nuclear generating plants. FPL follows the guidance of Appendix A to Regulatory Guide 1.33 in identifying the types of activities that should have procedures or instructions to control the activity. Each procedure shall be sufficiently detailed for a qualified individual to perform the required function without direct supervision, but need not provide a complete description of the system or plant process.

3.1 Format and Content

Procedure format and content may vary from one location to the other. However, procedures include the following elements as appropriate to the purpose or task to be described:

• 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/Scope

The purpose for which the procedure is intended is clearly stated (if not clear from the title). The systems, structures, components, processes or conditions to which the procedure applies are also clearly described.

References

Applicable references, including reference to appropriate Technical Specifications, are required. 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/Initial Conditions

Prerequisites/initial conditions identify 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

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.

• Main Body

The main body of the procedure contains the step-by-step instructions in the degree of detail necessary for performing the required function or task.

Acceptance Criteria

The acceptance criteria provide 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.

Checklists

Complex procedures utilize checklists which may be included as part of the procedure or appended to it.

3.2 **Procedure Types**

Administrative Control Procedures

These include administrative procedures, directives, policies, standards, and similar documents that control the programmatic aspects of facility activities. These administrative documents ensure that the requirements of regulatory and license commitments are implemented. Several levels of administrative controls are applied ranging from those affecting the entire Company to those prepared at the implementing group level. These documents establish responsibilities, interfaces, and standard methods (rules of practice) for implementing programs. In addition to the administrative controls described throughout this QAPD, instructions governing the following activities are provided:

• Operating Orders/Procedures

Instructions of general and continuing applicability to the conduct of business to the plant staff are provided. Examples where these are applied include, but are not limited to, job turnover and relief, designation of confines of control room, definition of duties of operators and others, transmittal of operating data to management, filing of charts, limitations on access to certain areas and equipment, shipping and receiving instructions. Provisions are made for periodic review and updating of these documents, where appropriate.

• Special Orders

Management instructions, which have short-term applicability and require dissemination, are issued to encompass special operations, housekeeping, data taking, publications and their distribution, plotting process parameters, personnel actions, or other similar matters. Provisions are made for periodic review, updating, and cancellation of these documents, where appropriate.

Plant Security and Visitor Control

Procedures or instructions are developed to supplement features and physical barriers designed to control access to the plant and, as appropriate, to vital areas within the plant. Information concerning specific design features and administrative provisions of the plant security program is confidential and thus accorded limited distribution. The security and visitor control procedures consider, for example, physical provisions, such as: fences and lighting; lock controls for doors, gates and compartments containing sensitive equipment; and provisions for traffic and access control. Administrative provisions, such as: visitor sign-in and sign-out procedures; escorts and badges for visitors; emphasis on inspection, observation and challenging of strangers by operating crews; and a program of pre-employment screening for potential employees are also considered.

• Temporary Procedures

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 the normal procedures. These procedures ensure 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 extended in such a manner that portions of existing procedures do not apply. Temporary Procedures include designation of the period of time during which they may be used and are subject to the procedure review process as applicable.

Engineering Procedures

These documents provide instructions for the preparation of engineering documents, engineering analysis, and implementation of engineering programs. This includes activities such as designs; calculations; fabrication, equipment, construction, and installation specifications; drawings; analysis and topical reports; and testing plans or procedures. They include appropriate references to industry codes and standards, design inputs, and technical requirements.

Installation Procedures

These documents provide instructions for the installation of components generally related to new construction and certain modification activities. They include appropriate reference to industry standards, installation specifications, design drawings, and supplier and technical manuals for the performance of activities. These documents include provisions, such as hold or witness points, for conducting and recording results of required inspections or tests. These documents may include applicable inspection and test instructions subject to the requirements for test and inspection procedures below.

System Procedures

These documents 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. Actions to correct off-normal conditions 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. Separate procedures may be developed for correcting off-normal conditions for those events where system complexity may lead to operator uncertainty. Appropriate procedures will also be developed for the fire protection program.

Start-up Procedures

These documents 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 instruments are operable and properly set; valves are properly aligned, necessary system procedures, tests and calibrations have been completed; and required approvals have been obtained.

Shutdown Procedures

These documents contain guidance for operations during controlled shutdown and following reactor trips, including instructions for establishing or maintaining hot shutdown/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 and cooldown rates, sequence for activating or deactivating equipment, requirements for prompt analysis for causes of reactor trips or abnormal conditions requiring unplanned controlled shutdowns, and provisions for decay heat removal.

Power Operation and Load Changing Procedures

These documents contain instructions for steady-state power operation and load changing. These type documents include, as examples, provisions for use of control rods, chemical shim, coolant flow control, or any other system available for short-term or long-term control of reactivity, making deliberate load changes, responding to unanticipated load changes, and adjusting operating parameters.

Process Monitoring Procedures

These documents 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. Operating procedures address the appropriate nature and frequency of this monitoring.

Fuel Handling Procedures

These documents 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 (or other unique identifiers) and locations.

Maintenance Procedures

These documents contain instructions in sufficient detail to permit maintenance work to be performed correctly and safely, and include provisions, such as hold or witness points, for conducting and recording results of required inspections or tests. These documents may include applicable inspection or test instructions subject to the requirements for test and inspection procedures below. Appropriate referencing to other procedures, standards, specifications, or supplier manuals is provided. When not provided through other documents, instructions for equipment removal and return to service, and applicable radiation protection measures (such as protective clothing and radiation monitoring) will be included. Additional maintenance procedure requirements are addressed in NQA-1-1994, Subpart 2.18, Section 2.2, Procedures.

Radiation Control Procedures

These documents contain instructions for implementation of the radiation control 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; effluent and 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.

SECTION 3 OPERATIONAL PHASE PROCEDURES (CONTINUED)

Calibration and Test Procedures

These documents contain instructions for periodic calibration and testing of instrumentation and control systems, and for periodic calibration of measuring and test equipment used in activities affecting the quality of these systems. These documents provide for meeting surveillance requirements and for assuring measurement accuracy adequate to keep safety-related parameters within operational and safety limits.

Chemical and Radiochemical Control Procedures

These documents contain instructions for chemical and radiochemical control activities and include: the nature and frequency of sampling and analyses; instructions for maintaining coolant quality within prescribed limits; and limitations on concentrations of agents that could cause corrosive attack, foul heat transfer surfaces, or become sources of radiation hazards due to activation. These documents also provide for the control, treatment and management of radioactive wastes, and control of radioactive calibration sources.

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Emergency Operating Procedures

These documents 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 are taken in response. Format and content of emergency procedures are based on NUREG and Owner's Group(s) guidance that identify potential emergency conditions and require such procedures to include, as appropriate, 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.

Emergency Plan Implementing Procedures

These documents 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 facility's NRC approved Emergency Plan are met.

Test and Inspection Procedures

These documents provide the necessary measures to assure quality is achieved and maintained for the nuclear facilities. The instructions for tests and inspections may be included within other procedures, such as installation and maintenance procedures, but will contain the objectives, acceptance criteria, prerequisites for performing the test or inspection, limiting conditions, and appropriate instructions for performing the test or inspection, as applicable. 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.

SECTION 4 CONTROL OF SYSTEMS AND EQUIPMENT IN THE OPERATIONAL PHASE

Permission to release systems and equipment for maintenance or modification is controlled by designated operating personnel and documented. Measures, such as installation of tags or locks and releasing stored energy, are used to ensure personnel and equipment safety. When entry into a closed system is required, FPL has established control measures to prevent entry of extraneous material and to assure that foreign material is removed before the system is reclosed. Administrative procedures require the designated operating personnel to verify that the system or equipment can be released and determine the length of time it may be out of service. In making this determination, attention is given to the potentially degraded degree of protection where one subsystem of a redundant safety system is not available for service. Conditions to be considered in preparing equipment for maintenance include, for example: shutdown margin; method of emergency core cooling; establishment of a path for decay heat removal; temperature and pressure of the system; valves between work and hazardous material; venting, draining and flushing; entry into closed vessels; hazardous atmospheres; handling hazardous materials; and electrical hazards.

When systems or equipment are ready to be returned to service, designated operating personnel control placing the items in service and document its functional acceptability. Attention is given to restoration of normal conditions, such as removal of jumpers or signals used in maintenance or testing, or actions such as returning valves, breakers or switches to proper start-up or operating positions from "test" or "manual" positions. Where necessary, the equipment placed into service receives additional surveillance during the run-in period.

Independent verifications, where appropriate, are used to ensure that the necessary measures have been implemented correctly. The minimum requirements and standards for using independent verification are established in company documents.

SECTION 5 PLANT MAINTENANCE

FPL establishes controls for the maintenance or modification of items and equipment subject to this QAPD 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.

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

- Where Subpart 2.18 refers to the requirements of ANS-3.2, it shall be interpreted to mean the applicable standards and requirements established within the QAPD
- Section 2.3 requires cleanliness during maintenance to be in accordance with Subpart 2.1. The commitment to Subpart 2.1 is described in the QAPD, Part II, Section 13.2.

PART VI REVISION SUMMARIES

Revisions 0 - 5 (May 28, 2019)	
Change/Reason for Change	Basis for Meeting 10 CFR 50
Previously reviewed	Previously reviewed
Revision 6 (I	November 25, 2019)
Change/Reason for Change	Basis for Meeting 10 CFR 50
 Update the QAPD to reflect the organizational structure following fleet organizational announcement. Page 15 Updated responsibilities of VP corporate support & General Manager (GM) Fleet Engineering Page 16 Updated responsibilities of Fleet Projects & Construction & added Safety Assurance & Learning GM position p. 19 Added to site organization Engineering Site Director and Safety Assurance and Learning Station Director p. 20 Updated Licensing & Training Site Manager's position description. Removes offsite Engineering Site Director. P. 21 Removes offsite Design Engineering Site Manager p. 23 Updated titles for VP & CNO, NEE President & COO, Figure 1-1 p. 24 Added new positions to fleet corporate organization, Figure 1-2 p. 42 Remove reference to EPRI NP-5652 and update with EPRI 3002002982. EPRI 3002002982 provided revision to EPRI NP- 5652 and references Generic Letter 89-02 and 91-05. 	 Organizational changes (Section 1) Organizational changes were reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. NQA-1-1994 Commitment / Exceptions (Sec. 7.2, p. 42) This change was evaluated in accordance with 10 CFR 50.54(a) requirements. The change is allowing the use of a QA standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA program at the time of the change. This change is not considered a reduction in commitment based on the guidance in NA-AA-210-1000, Attachment 1, Step i., and the following: EPRI 3002002982 provided revision to EPRI NP5652 and reference Generic Letter 89-02 and 91-05. Regulatory Guide 1.164 endorses, in part, the EPRI 3002002982, Revision 1 to EPRI NP-5652 and TR-102260, "Plant Engineering: Guideline for the Acceptance of Commercial-Grade Items in Nuclear Safety-Related Applications," with respect to acceptance of commercial-grade dedication of items and service to be used as basic components for nuclear power plants. Regulatory Guide 1.164 documents that EPRI 3002002982 is acceptable to the NRC staff in providing an adequate basis for dedication as defined in 10 CFR Part 21, and fulfills the QA requirement in Appendix B of 10 CFR Part 50, subject to the exceptions or clarifications provided in Regulatory Guide

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Revision 7 (May 05, 2020)	
Change/Reason for Change	Basis for Meeting 10 CFR 50
 The changes incorporated within this revision include the following: Update the QAPD to reflect the organizational structure following fleet re-organizational updates. The changes reflect the current organization which relocates the roles responsibility for PTN 6&7 to the VP Nuclear. In addition, the changes clarify the maintaining of the license prior to FPL/NEE making a decision to construct PTN 6&7. Revise to comply to NRC approved guidance but at a later revision than what is currently identified in RIS-2000-18, Guidance on Managing Quality Assurance Records in Electronic Media. Adopt a standard criterion for audit interval maximum extension of 25% of the audit interval and state the timeframe in months that shall not be exceeded. Revise the reporting relationship of the CNO to reflect a direct report to the Chairman and CEO and to reflect the responsibility of company officer responsible for ensuring that defects and non-compliances are reported to the NRC. p. 8 Clarifies generally responsibilities p. 11, 15 - 18 Updates to reflect organizational changes p. 24 Update to Construction & Startup Organizational, Eigure 1.1 	 Exception added to reference the 2011 Nuclear Information and Records Management Association (NIRMA) technical guides as follows: TG 11-2011, Authentication of Records and Media, TG 15-2011, Management of Electronic Records, TG 16-2011, Software Quality Assurance Documentation and Records, TG 21-2011, Required Records Protection, Disaster Recovery and Business Continuation. This change was reviewed and approved by the NRC's in a response to Duke Energy's submittal letter (ADAMS – Accession No. ML14300A011, dated October 23, 2014) requesting a safety evaluation of the QATR amendment. The NRC evaluated the submittal and concluded "the newer 2011 version of the NIRMA technical guides provide additional implementing details that continue to meet the quality assurance record requirements contained in 10CFR 50 Appendix B, Criterion XVII." (ADAMS Accession No. ML15099A561, dated May 11, 2015) Bases on the above, the change described does not result in a reduction of any QA Program commitment due to the use of a QA Standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA program at the time of the change.
 p. 25 Update to Fleet Corporate Operating Organization, 	2 Adoption of standard industry criteria for maximum audit
Figure 1-2 • p 28 Change grace period from 90 days to 25% in general	extensions.
 p. 56 Update references for electronic records p. 70 Change grace period from 90 days to 25%, not to exceed 30 months 	 The maximum extension of 25 percent of audit intervals is consistent with similar criteria approved by the NRC for multiple nuclear utilities, including but not limited to Southern Nuclear, Exelon, and First Energy. The NRC staff previously approved similar audit extension

Revision 7 (May 05, 2020)	
Change/Reason for Change	Basis for Meeting 10 CFR 50
	 provisions siting that the revised program conforms to the acceptance criteria of NUREG-0800, sections 17.2, and continues to satisfy the quality assurance requirement of Appendix B to 10 CFR Part 50 and are therefore acceptable. U.S. NRC Letter with Safety Evaluation to Southern Nuclear Operating Company, Inc., ADAMS Accession No. ML051570349 U.S. NRC letter to Rochester Gas and Electric, "Approve or Proposed Revisions to the RG&E Corporation's RE Ginna Nuclear Power Plant Quality Assurance Program for Station Operation," July 22, 1998. ADAMS Accession No ML101820108. The proposed QATR changes described are in compliance with 10CFR50, Appendix B. The changes do not degrade the effectiveness of the audits performed under the NEE Quality Assurance Program and is not considered a reduction in commitment based on the following guidance in NA-AA-210-1000, Attachment 1: The use of a QA standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA Program at the time of the change.
	 3. Revise the reporting relationship of the CNO and other organizational changes. Organizational revision and persons and organizations performing quality functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations. This change is not considered a reduction in commitment based on the following guidance in NA-AA-210-1000, Attachment 1: The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles. The use of generic organizational charts to indicate functional

Revision 7 (May 05, 2020)	
Change/Reason for Change	Basis for Meeting 10 CFR 50
	relationships, authorities, and responsibilities, or, alternately, the use of descriptive text.
	 Organizational changes were reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment.

Revision 8 (June 23, 2020)		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
 Administrative change to add the following verbiage to Section 7.1, Acceptance of Item or Service, to clarify the maximum time limits outlined in Section 2, Quality Assurance Program, for extending supplier triennial audits which was inadvertently left off in Revision 7. 	 Administrative changes The administrative charge and correction were reviewed in accordance with 10 CFR 50.54(a) and determined not to constitute a reduction in commitment. 	
 Page 17-19 Add header "Section 1 ORGANIZATION (Continued)" to top of page 		
 Page 39 Add "A grace period of 25 percent of the audit Interval may be applied 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 45 months and not exceed 3.25 times the specified Interval for any three consecutive inspections or audits." 		

Revision 9 (December 03, 2020)	
Change/Reason for Change	Basis for Meeting 10 CFR 50
Update the QATR to reflect the organizational structure	Administrative changes
following fleet organizational announcements.	The administrative change and correction were reviewed in
 Remove CEO signature from the Policy statement 	accordance with 10 CFR 50.54(a) and determined not to
page, per the CEO request.	constitute a reduction in commitment.
Add revision information.	
	Organizational Announcements.
	 The use of generic organizational charts to indicate functional
	relationships, authorities, and responsibilities, or, alternately,
	the use of descriptive text. (paragraph iv)
	Remove CEO signature from the Policy statement page per the
	CEO request.
	Organizational revisions that ensure that persons and
	organizations performing quality assurance functions continue
	including sufficient independence from cost and schedule
	when opposed to safety considerations. (paragraph vi).

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Revision 10 (May 13, 2021)	
Change/Reason for Change	
 QD-009: The changes incorporated within this revision include the following: 1. To change the internal audit frequency from 24 months to 36 months and add an annual evaluation. 	These changes were evaluated in accordance with 10 CFR 50.54 (a) requirements. The justification information below was reviewed and approved during the revision process for the respective QATR changes.
	Justification for Change #1:
2. Remove the QC Program from Nuclear Assurance and Assessment responsibilities.	The proposed change does not represent a reduction in effectiveness or compliance with 10 CFR 50 Appendix B, "Quality Assurance Criteria for Nuclear Power Plants." A comprehensive system of planned and periodic audits will continue to be performed by independent trained personnel using written procedures to verify compliance with all aspects of the QAP. The internal audit program will continue to be conducted on a performance driven frequency that is commensurate with the status and importance of the activity to be completed. Performance of functional area and vendor audits will continue to determine effectiveness of the program.
	The proposed frequency change supplemented by evaluation is similar to audit requirements outlined in ASME NQA-1-2015, "Quality Assurance for Nuclear Facility Applications," that was endorsed by Regulatory Guide 1.28, "Quality Assurance Program Criteria (Design and Construction)," Revision 5. This revision of NQA-1, Requirement 18, "Audits," Section 201 .2, "Nuclear Facilities After Placing the Facility into Operation," references extending the 2-year internal audit interval to 3 years, not to exceed 4 years with performance of an annual evaluation.
	Also, the proposed changes are similar to ANSI/ANS 3.2-2012, "Managerial, Administrative and Quality Assurance Controls for the Operational Phase of Nuclear Power Plants," that was endorsed by Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 3.
Revision 10 (May 13, 2021)	
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Change/Reason for Change	Basis for Meeting 10 CFR 50
	This quality standard also, provides guidance in section 3.18.1.1, "Regularly Scheduled Audits," for extending the 2-year frequency not to exceed 4 years with performance of an annual evaluation. In addition, the proposed 36-month audit frequency is consistent with external audit requirements for audit of suppliers and with NRC triennial inspections.
	It should be noted that NextEra Energy is not adopting NQA-1-2015 or ANSI/ANS 3.2-2012 as part of this proposed change but is only citing those standards to show that the proposed frequencies are similar to other NRC endorsed standards. The variations between the proposed changes and NRC endorsed quality standards include setting the audit frequency to 36 months with 25% grace versus the 2-year frequency with a 1-year extension(s) not to exceed 4 years described in NQA-1-2015 and ANSI/ANS 3.2-2012 standards. The proposed evaluation will focus on identifying areas that require audit activity prior to the next scheduled audit, rather than justifying extension.
	Functional area audits and evaluations would be separated into three cycles covering a period of 36 months. Each cycle includes a set of audits and evaluations. Results of the completed audits will be reviewed to determine if additional audit activities are necessary prior to their next scheduled performance. Each functional audit area will receive an additional performance analysis (evaluation) within 2 years of the last performed audit based on internal and external data; functional area changes in responsibility, resources, or management; and consideration of the impacts, as evaluation will focus on identifying areas that require audit activity prior to the next scheduled audit, rather than justifying extension.
	Functional area audits and evaluations would be separated into three cycles covering a period of 36 months. Each cycle includes a set of audits and evaluations.

Change/Reason for Change Basis for Meeting 10 CFR 50
Results of the completed audits will be reviewed to determine if additional audit activities are necessary prior to their next scheduled performance. Each functional audit area will receive an additional performance analysis (evaluation) within 2 years of the last performed audit based on internal and external data; functional area changes in responsibility, resources, or management; and considerat of the impacts, as applicable, to determine if additional audit activities are necessary prior to the 36-month scheduled performance. These evaluations will meet the intent of the annual evaluation described in NRC endorsed quality standards by ensuring action by the audit organization upon evaluation of adverse performance trends should they exist prior to the next scheduled audit activity. The resulting activities will be based on the problem identified and may include one or more a variety of audit tools, such as simple observations, follow-up review limited scope audits up to a full audit of the functional area. In aggregate, these changes will continue to meet the fundamental requirements of an internal audit program as described in quality standards endorsed by the NRC and will continue to provide proper coverage of QAP activities. The changes will allow audits to be scheduled at a frequency commensurate with the status and importance of the activity. Evaluations of performance will be used to effectively focus audit resources in areas indicating gaps in QAP implementation.

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Revision 10 (May 13, 2021)		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
	Justification for Change #2: Revising the Director Nuclear Assurance & Assessment Organization responsibility, Section A.2.1.2.g., to specify only the management of independent assessment (Quality Assurance (QA)), and the removal of "QC" from "QA/QC" from Section C.3 – Independent Assessment does not reduce the responsibilities of Quality Control (QC) inspection as required in accordance with Section B.12 – Inspection.	
	Precedent: Exelon Generating Company ML20287A130 11/5/2020.	
	 References: ANSI N18.7-1972, "Administrative Controls for Nuclear Power Plants" ANSI N18.7-1976/ANS 3.2, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants (Limerick, Fitzpatrick, Clinton)" ANSI/ANS 3.2-1988, "Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants (Braidwood, Byron, Dresden, LaSalle and Quad Cities)" Regulatory Guide 1.189, "Fire Protection for Nuclear Power Plants" NQA-1-1994, "Quality Assurance Program Requirement for Nuclear Facilities" 	
	Based on the above, the change described does not result in a reduction of any QA Program commitment due to the use of a QA Standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA program at the time of the change.	

Page 87 of 89

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Revision 10 (May 13, 2021)		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
QD-010: The changes incorporated within this revision include the following:	These changes were evaluated in accordance with 10 CFR 50.54 (a) requirements. The justification information below was reviewed and approved during the revision process for the respective QATR changes.	
 Changes implemented due to issuance of NEI 14-045A, Rev 1 including clarifications and conservative adjustments. References to ISO/IEC 17025:2005 have been replaced with references to ISO/IEC 17025:2017, Clarifications on limits of use have been added to indicate the ILAC process is not intended to be utilized for the commercial grade dedication of Nondestructive Examination (NDE) services. Subcontracting of accredited services is prohibited. The ILAC process is intended for use by licensees and suppliers of basic components as a part of the commercial grade dedication process and must be used in conjunction with other NRC-endorsed commercial grade dedication guidance such as EPRI TR3002002982. A limitation has been placed on the use of remote accreditation assessments to maintain accreditation. Sample technical evaluations for both calibration and testing services have been included as attachments to NEI 14-05A, Rev. 1. 	The NRC SER dated February 19, 2021 concluded that NEI 14.05a, Revision 1 continues to provide an acceptable approach for licensees and suppliers subject to the QA requirements of Appendix B to 10 CFR Part 50 for using laboratory accreditation by ABs that are signatories to the ILAC MRA in lieu of performing commercial-grade surveys as part of the commercial-grade dedication process for procurement of calibration and testing services performed by domestic and international laboratories accredited by signatories to the ILAC MRA. (ADAMS Accession Number ML20322A019) Bases on the above, the change described does not result in a reduction of any QA Program commitment due to the use of a QA Standard approved by the NRC which is more recent than the QA standard in NextEra Energy's current QA program at the time of the change.	
Revision 10 (May 13, 2021)		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
QD-011 Rev. 1: The changes incorporated within this revision include the following:	These changes were evaluated in accordance with 10 CFR 50.54 (a) requirements and does not result in a reduction of any QA Program commitment due to the use of generic organizational position titles	
Add to section 1.2.5. Fleet Engineering - Fleet Capital Group	that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles. (iii)	
Change Senior Director IT Business Solutions to Senior Director, IT Nuclear in section 1.2.10.		

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Revision 10 (May 13, 2021)		
Change/Reason for Change	Basis for Meeting 10 CFR 50	
QD-012: The changes incorporated within this revision include the following:	These changes were evaluated in accordance with 10 CFR 50.54 (a) requirements. The justification information below was reviewed and approved during the revision process for the respective QATR changes.	
 Editorial change from Regulatory Guide 1.165 to 1.164. 	RG 1.165 "Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion" was incorrectly referenced. The correct reference is RG 1.164, Dedication of Commercial-Grade Items for Use in Nuclear Power Plants.	

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