



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

September 10, 2013

Mr. Mano Nazar
Executive Vice President
and Chief Nuclear Officer
NextEra Energy
P. O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: TURKEY POINT NUCLEAR GENERATING UNIT NO. 3 - ISSUANCE OF
AMENDMENT REGARDING A ONE-TIME EXTENSION OF TECHNICAL
SPECIFICATION SURVEILLANCE REQUIREMENT 4.5.1.1.d FOR UNIT 3
(TAC NO. MF1041)

Dear Mr. Nazar:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 258 to Renewed Facility Operating License No. DPR-31 for the Turkey Point Nuclear Generating Unit No. 3 (TPNG Unit 3). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated March 8, 2013, as supplemented by letter dated July 12, 2013.

The amendment revises Surveillance Requirement 4.5.1.1.d of TS 3/4.5.1, "Accumulators," by adding a note that allows a one-time extension of the surveillance requirement frequency for checking the operability of the accumulator check valves. The one-time extension applies only to Cycle 26 of TPNG Unit 3. This amendment accounts for rescheduling the TPNG Unit 3 Cycle 27 refueling outage from January 2014 to March 2014.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink that reads "Farideh E. Saba".

Farideh E. Saba, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-250

Enclosures:

1. Amendment No. 258 to DPR-31
2. Safety Evaluation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

FLORIDA POWER & LIGHT COMPANY

DOCKET NO. 50-250

TURKEY POINT NUCLEAR GENERATING UNIT NO. 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 258
Renewed License No. DPR-31

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Florida Power & Light Company (the licensee) dated March 8, 2013, as supplemented by letter dated July 12, 2013, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

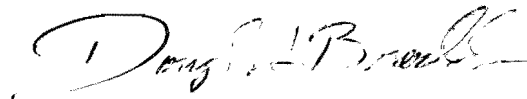
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B of Renewed Facility Operating License No. DPR-31 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 258 are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Douglas A. Broaddus, Acting Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Operating License
and Technical Specifications

Date of Issuance: September 10, 2013

ATTACHMENT TO LICENSE AMENDMENT NO. 258
RENEWED FACILITY OPERATING LICENSE NO. DPR-31

DOCKET NO. 50-250

Replace Page 3 of Renewed Facility Operating License No. DPR-31 with the attached Page 3.

Replace the following page of the Appendix A Technical Specifications with the attached page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove page
3/4 5-2

Insert page
3/4 5-2

- E. Pursuant to the Act and 10 CFR Parts 40 and 70 to receive, possess, and use at any time 100 milligrams each of any source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactively contaminated apparatus;
 - F. Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Turkey Point Units Nos. 3 and 4.
3. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations: 10 CFR Part 20, Section 30.34 of 10 CFR Part 30, Section 40.41 of 10 CFR Part 40, Sections 50.54 and 50.59 of 10 CFR Part 50, and Section 70.32 of 10 CFR Part 70; and is subject to all applicable provisions of the Act and to the rules, regulations, and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified below:
- A. Maximum Power Level

The applicant is authorized to operate the facility at reactor core power levels not in excess of 2644 megawatts (thermal).
 - B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 258 are hereby incorporated into this renewed license. The Environmental Protection Plan contained in Appendix B is hereby incorporated into this renewed license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 - C. Final Safety Analysis Report

The licensee's Final Safety Analysis Report supplement submitted pursuant to 10 CFR 54.21(d), as revised on November 1, 2001, describes certain future inspection activities to be completed before the period of extended operation. The licensee shall complete these activities no later than July 19, 2012.

The Final Safety Analysis Report supplement as revised on November 1, 2001, described above, shall be included in the next scheduled update to the Final Safety Analysis Report required by 10 CFR 50.71(e)(4), following the issuance of this renewed license. Until that update is complete, the licensee may make changes to the programs described in such supplement without prior Commission approval, provided that the licensee evaluates each such change pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.

EMERGENCY CORE COOLING SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

- b. At least once per 31 days and within 6 hours after each solution volume increase of greater than or equal to 1% of tank volume by verifying the boron concentration of the solution in the water-filled accumulator is between 2300 and 2600 ppm;
- c. At least once per 31 days, when the RCS pressure is above 1000 psig, by verifying that the power to the isolation valve operator is disconnected by a locked open breaker.
- d. At least once per 18* months, each accumulator check valve shall be checked for operability.

* During Unit 3 Cycle 26 only, in lieu of the Technical Specification specified 18 month refueling frequency and 4.5 month grace period allowance, the maximum allowed surveillance test interval will be extended to no more than 24.5 months.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 258 TO

RENEWED FACILITY OPERATING LICENSE NO. DPR-31

FLORIDA POWER & LIGHT COMPANY

TURKEY POINT NUCLEAR GENERATING UNIT NO. 3

DOCKET NO. 50-250

1.0 INTRODUCTION

By application dated March 8, 2013, as supplemented by letter dated July 12, 2013 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML13071A469 and ML13197A223, respectively), Florida Power & Light Company (FPL, the licensee) requested changes to the Technical Specifications (TSs) for the Turkey Point Nuclear Generating Unit No. 3 (TPNG Unit 3). The proposed change would revise Surveillance Requirement (SR) 4.5.1.1.d of TS 3/4.5.1, "Accumulators," by adding a note that allows a one-time extension of the SR frequency for checking the operability of the emergency core cooling system (ECCS) accumulator check valves. The change will extend the maximum allowed surveillance test interval of the ECCS accumulator check valves 3-875A, 3-875B, 3-875C, 3-875D, 3-875E, and 3-875F from 22.5 months (i.e., the 18-month frequency specified in SR 4.5.1.1.d plus the 25 percent extension allowed by TS 4.0.2) to 24.5 months (i.e., a 2-two-month extension). The one-time extension would apply only to Cycle 26 of TPNG Unit 3. This amendment would account for rescheduling the TPNG Unit 3 Cycle 27 refueling outage from January 2014 to March 2014.

In its application dated March 8, 2013, the licensee requested that the proposed change be a new license condition. During a conference call on July 1, 2013, the NRC staff informed the licensee that a separate license condition would conflict with License Condition 3.B that requires the licensee to operate the facility in accordance with the Technical Specifications. Therefore, by letter dated July 12, 2013, the licensee resubmitted the proposed change as a note within the TSs. The supplement did not expand the scope of the application as originally noticed, and did not change the U.S. Nuclear Regulatory Commission (NRC or the Commission) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on May 28, 2013 (78 FR 31982).

2.0 REGULATORY EVALUATION

The licensee proposed a one-time extension of the SR frequency for checking the operability of the TPNG Unit 3 ECCS accumulator check valves. The NRC staff considered the following regulatory requirements, guidance, and licensing basis information during its review of the proposed change.

Section 6.2, "Safety Injection [SI] System," of the Turkey Point Units 3 and 4 Updated Final Safety Analysis Report (UFSAR) describes the design basis for the ECCS capability and the accumulator check valves. Adequate emergency core cooling following a loss-of-coolant accident (LOCA) is provided by the SI system. The SI system components operate in three modes, one of which is injection of borated water by passive accumulators. The accumulators are pressurized vessels filled with borated water. During normal operation, each accumulator is isolated from the reactor coolant system (RCS) by two accumulator check valves in series. In the event of a LOCA, if the RCS pressure falls below the accumulator pressure, then the check valves open, and borated water is forced into the RCS. Mechanical operation of the swing-disc check valves is the only action required to open the injection path from the accumulators to the core via the RCS cold leg piping.

TS 4.0.1 states, in part, "Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for Limiting Conditions for Operation [LCO] unless otherwise stated in the individual Surveillance Requirement."

TS 4.0.2 states, "Each Surveillance Requirement shall be performed within the specified time interval with a maximum allowable extension not to exceed 25% of the surveillance interval. If an ACTION item requires periodic performance on a 'once per ...' basis, the above frequency extension applies to each performance after the initial performance. Exceptions to this Specification are stated in the individual Specifications."

Title 10 of the *Code of Federal Regulations*, Part 50, "Domestic Licensing of Production and Utilization Facilities," (10 CFR Part 50) provides the regulatory requirements for the licensing of production and utilization facilities.

Appendix A, "General Design Criteria [GDC] for Nuclear Power Plants," to 10 CFR Part 50 establishes the minimum requirements for the principal design criteria for water-cooled nuclear power plants. The principal design criteria establish the necessary design, fabrication, construction, testing, and performance requirements for structures, systems, and components important to safety. The GDC used during the licensing of TPNG Unit 3, which were based on the 1967 Atomic Energy Commission Proposed GDC, predate those provided in Appendix A of 10 CFR Part 50. The UFSAR describes the GDC applicable to TPNG Unit 3 (referred to throughout this safety evaluation as the TPNG GDC). Attachment 4 (ADAMS Accession No. ML103560177) to FPL's license amendment request (LAR) dated December 13, 2010, for an extended power uprate (EPU) indicated a comparison of the TPNG GDC to the GDC in 10 CFR Part 50, Appendix A.

Section 6.2.1 of the UFSAR describes TPNG GDC-44 for ECCS capability and states:

An emergency core cooling system with the capability for accomplishing adequate emergency core cooling shall be provided. This core cooling system and the core shall be designed to prevent fuel and clad damage that would interfere with the emergency core cooling function and to limit the clad metal-water reaction to acceptable amounts for all sizes of breaks in the reactor coolant piping up to the equivalent of a double-ended rupture of the largest pipe. The performance of such emergency core cooling system shall be evaluated conservatively in each area of uncertainty.

Attachment 4 to the licensee's EPU LAR indicates that this criterion is similar to 10 CFR Part 50, Appendix A, Criterion 35, "Emergency core cooling," which states:

A system to provide abundant emergency core cooling shall be provided. The system safety function shall be to transfer heat from the reactor core following any loss of reactor coolant at a rate such that (1) fuel and clad damage that could interfere with continued effective core cooling is prevented and (2) clad metal-water reaction is limited to negligible amounts.

Suitable redundancy in components and features, and suitable interconnections, leak detection, isolation, and containment capabilities shall be provided to assure that for onsite electric power system operation (assuming offsite power is not available) and for offsite electric power system operation (assuming onsite power is not available) the system safety function can be accomplished, assuming a single failure.

As required by 10 CFR 50.36(c)(2)(ii)(C), "Criterion 3," a TS LCO of a nuclear reactor must be established for a structure, system, and component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

As required by 10 CFR 50.36(c)(3), "Surveillance Requirements," surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

As required by 10 CFR 50.55a(f)(4), "Inservice testing requirements," pumps and valves which are classified as American Society of Mechanical Engineers (ASME) Code Class 1, Class 2, and Class 3 must meet the inservice test requirements, except design and access provisions, set forth in the ASME Operations and Maintenance Code and addenda.

3.0 TECHNICAL EVALUATION

Limiting Condition for Operation (LCO) 3.5.1 for TS 3/4.5.1 states, "Each Reactor Coolant System (RCS) accumulator shall be OPERABLE." The applicability for this LCO is Modes 1, 2, and 3* (* denotes Pressurizer pressure above 1000 pounds per square inch gauge). The accumulators are vessels filled with borated water and pressurized with nitrogen gas. During

normal operation, each accumulator is isolated from the RCS by two check valves in series. SR 4.5.1.1 contains four requirements for demonstrating each accumulator is operable. One of these requirements is SR 4.5.1.1.d, which states, "At least once per 18 months, each accumulator check valve shall be checked for operability." This SR pertains to Cold Leg Injection Check Valves 3-875A, 3-875B, 3-875C, and SI Accumulator Check Valves 3-875D, 3-875E, and 3-875F. This requirement supports the regulatory bases stated in the Section 2.0 of this safety evaluation (SE).

The licensee proposed to amend Renewed Facility Operating License DPR-31 for TPNG Unit 3 by adding a note to the TS allowing a one-time extension of SR 4.5.1.1.d. The licensee requested that 2 months to be added to the currently specified refueling outage interval of 18 months plus a 4½-month grace period. The extension would allow the plant to optimize fuel burn-up during the current TPNG Unit 3 operating cycle (i.e., Cycle 26). The licensee needs the extension because of a longer-than-expected EPU refueling outage and associated power ascension test program and two recent forced unit outages.

The accumulator check valve operability check is completed using a surveillance test procedure that exercises each check valve. This is accomplished by filling and pressurizing the associated accumulator while it is isolated from its RCS loop and then opening the associated accumulator motor-operated valve. This action sends water from the accumulator through the check valves and into the reactor vessel. The surveillance procedure requires the licensee to perform this test with the reactor vessel head removed and the reactor cavity flooded in order to minimize the potential introduction of noncondensable gases (nitrogen) into the RCS. The licensee verifies check valve operation by observing system parameters and monitoring each individual check valve with diagnostic technologies. A review of the last six TPNG Unit 3 outages indicated satisfactory test performance and no check valve failures.

During normal operation, Cold Leg Injection Check Valves 3-875A, 3-875B, 3-875C and the SI Accumulator Check Valves 3-875D, 3-875E, 3-875F remain closed to prevent back leakage of the RCS system and provide a pressure boundary. It is impractical to exercise these valves during normal operation because this would place the plant in an undesirable configuration. The few number of times the valves are exercised yields little wear of the valve internals. The limited amount of check valve operation and the excellent performance history of the Cold Leg Injection Check Valves 3-875A, 3-875B, 3-875C and the SI Accumulator Check Valves 3-875D, 3-875E, and 3-875F provide reasonable assurance of operational readiness to support a minor extension (i.e., 2 months) of SR 4.5.1.1.d.

The NRC staff finds that the proposed one-time extension of SR 4.5.1.1.d for the ECCS accumulator check valves 3-875A, 3-875B, 3-875C, 3-875D, 3-875E, and 3-875F from 22.5 months to 24.5 months will have minimal effect on component performance. The proposed amendment is acceptable and consistent with the regulatory requirements specified in Section 2.0 of this SE.

4.0 STATE CONSULTATION

By letter dated May 2, 2003 (ADAMS Accession No. ML032470912), from Michael N. Stephens of the Florida Department of Health, Bureau of Radiation Control, to Brenda L. Mozafari, Senior Project Manager, U.S. Nuclear Regulatory Commission, the State of Florida indicated it does

not desire notification of issuance of license amendments. By electronic mail dated July 25, 2012 (ADAMS Accession No. ML12208A014), from Cynthia Becker of the Florida Department of Health, Bureau of Radiation Control, to Farideh E. Saba, Senior Project Manager, U.S. Nuclear Regulatory Commission, the State of Florida confirmed that the May 2003 letter continues to reflect the State's position on notification of issuance of license amendments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes SRs. The NRC staff determined that the amendment involves no significant increase in the amounts and no significant change in the types of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. By *Federal Register* notice 78 FR 31982 dated May 28, 2013, the Commission previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on this finding. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment will be prepared in connection with the issuance of the amendment.

7.0 CONCLUSION

Based on the aforementioned considerations, the NRC staff has concluded that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) there is reasonable assurance that such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Michael Farnan

Date: September 10, 2013

September 10, 2013

Mr. Mano Nazar
Executive Vice President
and Chief Nuclear Officer
NextEra Energy
P. O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: TURKEY POINT NUCLEAR GENERATING UNIT NO. 3 - ISSUANCE OF AMENDMENT REGARDING A ONE-TIME EXTENSION OF TECHNICAL SPECIFICATION SURVEILLANCE REQUIREMENT 4.5.1.1.d FOR UNIT 3 (TAC NO. MF1041)

Dear Mr. Nazar:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 258 to Renewed Facility Operating License No. DPR-31 for the Turkey Point Nuclear Generating Unit No. 3 (TPNG Unit 3). The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated March 8, 2013, as supplemented by letter dated July 12, 2013.

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Sincerely,
/RA/
Farideh E. Saba, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-250

Enclosures:

1. Amendment No. 258 to DPR-31
2. Safety Evaluation

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ADAMS Accession No.: ML13207A095

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NAME	AKlett	FSaba	BClayton	TLupold	CJackson (Kent Wood for)
DATE	8/6/13	8/6/13	8/6/13	8/7/13	8/12/13
OFFICE	DSS/STSB/BC	OGC - NLO	LPL2-2/BC (A)	LPL2-2/PM	
NAME	RElliott	STurk	DBroaddus	FSaba	
DATE	8/6/13	8/14/13	9/10/13	9/10/13	

OFFICIAL RECORD COPY

Letter to M. Nazar from F. Saba dated September 10, 2013.

SUBJECT: TURKEY POINT NUCLEAR GENERATING UNIT NO. 3 - ISSUANCE OF AMENDMENT REGARDING A ONE-TIME EXTENSION OF TECHNICAL SPECIFICATION SURVEILLANCE REQUIREMENT 4.5.1.1.d FOR UNIT 3 (TAC NO. MF1041)

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