



August 10, 2012  
L-2012-320  
10 CFR 50.90

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

Re: Turkey Point Nuclear Generating Station Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Supplement to License Amendment Request No. 221: Application to Revise  
Technical Specifications to Adopt TSTF-510, "Revision to  
Steam Generator Program Inspection Frequencies and Tube  
Sample Selection," Using the Consolidated Line Item  
Improvement Process

By letter L-2012-231 dated July 16, 2012, and pursuant to 10 CFR 50.90, Florida Power & Light Company (FPL) submitted a request for an amendment to the Technical Specifications (TS) for Turkey Point Nuclear Generating Station (Turkey Point) Units 3 and 4. The proposed amendment would modify TS requirements regarding steam generator tube inspections and reporting as described in TSTF-510, Revision 2, "Revision to Steam Generator Program Inspection Frequencies and Tube Sample Selection."

The purpose of this letter is to clarify the amendment request as described in Enclosure 1 to L-2012-231. Section 1 of Enclosure 1 was revised to document that the amendment request includes revisions to TS 3.4.5 Limiting Condition of Operation and TS Surveillance Requirement 4.4.5.2. In addition, Section 2.3.1 of Enclosure 1 was revised to specify the differences between the TSTF-510 TS numbering and the Turkey Point Units 3 and 4 TS numbering. The changes to Enclosure 1 to L-2012-231 are marked by a revision bar on the right margin of the page. The revised Enclosure 1 to L-2010-231 is included as an attachment to this letter and is intended to replace it in its entirety. Enclosure 2 of L-2012-231 contained the mark ups of the proposed changes to TS 3/4.4.5; therefore, it is not affected by this clarification. Enclosure 3 of L-2012-231 provided the existing TS Bases pages marked up to show the proposed changes. Enclosure 3, provided for NRC information only, is not affected by this clarification. The clarification provided by this letter does not alter the significant hazards consideration or environmental assessment previously submitted by FPL letter L-2012-231.

FPL requests approval of the proposed amendment by November 5, 2012 to support the fall 2012 Turkey Point Unit 4 steam generator inspections. For administrative purposes, the amendment will be implemented within the implementation period.

In accordance with 10 CFR 50.91, a copy of this letter is being provided to the State Designee for the State of Florida.

A001  
MLL

Turkey Point Nuclear Generating Station Units 3 and 4  
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If you should have any questions regarding this submittal, please contact Mr. Robert Tomonto, Licensing Manager, at 305-246-7327.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 8 / 10 /2012.

Sincerely,



Michael W. Kiley  
Vice President - Turkey Point Nuclear Generating Station

Attachment

cc: Regional Administrator, Region II, USNRC  
NRC Senior Resident Inspector  
NRC Project Manager, Turkey Point  
W. A. Passetti, Florida Department of Health

Turkey Point Nuclear Generating Station Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Supplement to License Amendment Request No. 221:  
Application to Revise Technical Specifications to Adopt TSTF-510

L-2012-320  
Attachment

**ATTACHMENT TO L-2012-320**

**[Revised Enclosure 1 to L-2012-231]**

Turkey Point Nuclear Generating Station Units 3 and 4  
Docket Nos. 50-250 and 50-251  
License Amendment Request No. 221:  
Application to Revise Technical Specifications to Adopt TSTF-510

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Enclosure 1  
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**ENCLOSURE 1**

**DESCRIPTION AND ASSESSMENT OF THE PROPOSED CHANGES**

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**Turkey Point Units 3 & 4**  
**License Amendment Request for TSTF-510, "Revision to**  
**Steam Generator Program Inspection Frequencies and Tube**  
**Sample Selection," Using the Consolidated Line Item**  
**Improvement Process**

**1.0 DESCRIPTION**

The proposed change revises Technical Specifications (TS) 3/4.4.5, "Steam Generator (SG) Tube Integrity," TS 6.8.4.j, "Steam Generator (SG) Program" and TS 6.9.1.8, "Steam Generator Tube Inspection Report." The proposed changes are needed to address implementation issues associated with the inspection periods, and address other administrative changes and clarifications.

The proposed amendment is consistent with TSTF-510, Revision 2, "Revision to Steam Generator Program Inspection Frequencies and Tube Sample Selection."

**2.0 ASSESSMENT**

**2.1 Applicability of Published Safety Evaluation**

Florida Power & Light Company (FPL) has reviewed TSTF-510, Revision 2, "Revision to Steam Generator Program Inspection Frequencies and Tube Sample Selection," and the model safety evaluation dated October 27, 2011 (76 FR 66763) provided as part of the Federal Register Notice for Availability. As described in the subsequent paragraphs, FPL has concluded that the justifications presented in TSTF-510 and the model safety evaluation prepared by the NRC staff are applicable to Turkey Point Nuclear Generating Station (Turkey Point) Units 3 and 4 and justify this amendment for the incorporation of the changes to the Turkey Point Unit 3 and 4 TS.

**2.2 Need for Implementation of TSTF-510 at Turkey Point**

For Turkey Point Units 3 and 4, FPL is proposing to implement TSTF-510 during the current inspection period (the 3<sup>rd</sup> Inspection Period of 60 Effective Full Power Months (EFPM)) for both units, thereby increasing the current inspection period duration from 60 EFPM to 72 EFPM. Increasing the inspection period from 60 EFPM to 72 EFPM would also increase the number of refueling outages within the period for each unit.

Turkey Point Unit 3 completed 100% full length bobbin coil inspections in the first and third refueling outages in the 3<sup>rd</sup> Inservice Inspection (ISI) period (at RFO-23 and RFO-25) under the requirements of the current TS 6.8.4.j.d.2.

Turkey Point Unit 4 completed a 100% full length bobbin coil inspection in the second refueling outage in the 3<sup>rd</sup> ISI period (RFO-25) under the requirements of the current TS 6.8.4.j.d.2.

Turkey Point Units 3 and 4 are each planning 100% full length bobbin coil inspections during the next refueling outage (RFO-27 for each unit).

The initial need for implementation of TSTF-510 is for Turkey Point Unit 4, which is currently operating in the 3<sup>rd</sup> Inspection Period of 60 EFPM. The first operating cycle in the 3<sup>rd</sup> Inspection Period for Unit 4 was Cycle 23. However, only a portion of Cycle 23's operating-time is shown to elapse in the 3<sup>rd</sup> Inspection Period because Cycle 23 started during the last operating cycle in the 2<sup>nd</sup> Inspection Period of 90 EFPM. Because the 90 EFPM limit was reached for the 2<sup>nd</sup> Inspection Period during Cycle 23 operation, the remainder of Cycle 23's operating time was assigned to the 3<sup>rd</sup> Inspection Period of 60 EFPM.

During Refueling Outage 24 (RFO-24) at the End of Cycle 23 (EOC-23) operation, and during Refueling Outage 26 (RFO-26) at the End of Cycle 25 (EOC-25) operation, no SG examinations were required to be performed for Turkey Point Unit 4. Although SG inspections are scheduled to be performed at Unit 4 during Refueling Outage 27 (RFO-27) in the fall of 2012, to date there has only been one SG examination in the 3<sup>rd</sup> Inspection Period of 60 EFPM, performed during RFO-25 in 2009.

The need for implementation for Unit 4 during this fall outage is as follows: Unit 4 is currently in Cycle 26 operation, which is the last cycle of operation in the 3<sup>rd</sup> Inspection Period. As Cycle 26 approaches its end, the 3<sup>rd</sup> Inspection Period will be very nearly approaching 60 EFPM, which would be the end of the 3<sup>rd</sup> Inspection Period. If for some reason Cycle 26 operation was extended, there is a possibility that the SG examination scheduled for the fall of 2012 could slip into the 4<sup>th</sup> Inspection Period, which would result in Unit 4 having received only one SG examination in the 3<sup>rd</sup> Inspection Period.

Although the current plan is for the RFO-27 SG examination to take place as the 2<sup>nd</sup> inspection in the 3<sup>rd</sup> Inspection Period, implementation of TSTF-510 would permit extension of the 3<sup>rd</sup> Inspection Period from 60 EFPM to 72 EFPM, thereby ensuring that the SG examination scheduled for the fall of 2012 would fall in second half of the 3<sup>rd</sup> Inspection Period, as originally intended.

For Turkey Point Units 3 and 4, previously completed inspection periods and subsequent periods going forward will be adjusted as follows: 2nd period; 96 months; 3rd and subsequent periods; 72 months (once the License Amendment Request for TSTF-510 is approved).

### **2.3 Optional Changes and Variations**

FPL is not proposing any variations or deviations from the TS changes described in the TSTF-510, Revision 2, or the applicable parts of the NRC staff's model safety evaluation dated October 27, 2011. Some minor administrative clarifications are discussed below:

- 2.3.1** The Turkey Point Units 3 and 4 TS utilize different numbering than the Standard Technical Specifications on which TSTF-510 was based (i.e., NUREG-1431). Specifically, Turkey Point Units 3 and 4 use the Standard Technical Specifications (STS) format as cited in NUREG-0452, "Standard Technical Specifications for Westinghouse Pressurized Water Reactors." Specifically, TSTF-510 revised STS 3.4.20, "Steam Generator Tube Integrity." The Turkey Point equivalent TS is TS 3/4.4.5, "Steam Generator (SG) Tube Integrity." TSTF-510 revised STS 5.5.9, "Steam Generator (SG) Program." The Turkey Point equivalent TS is TS 6.8.4.j, "Steam Generator (SG) Program." TSTF-510 revised STS 5.6.7, "Steam Generator Tube Inspection Report." The Turkey Point equivalent TS is TS 6.9.1.8, "Steam Generator Tube Inspection Report." These differences are administrative and do not affect the applicability of TSTF-510 to the Turkey Point Units 3 and 4 TS.
- 2.3.2** One of the improvements of TSTF-510 was to revise references to "tube repair criteria" to "tube plugging [or repair] criteria". The WOG Standards TS mark-up of TS Section 5.5.9, "Steam Generator (SG) Program," provided in TSTF-510, Revision 2 contained three versions of paragraph 5.5.9.d.2 (one each for 600MA tubing, 600TT tubing, and 690TT tubing). All three versions contain the following statement:

"If a degradation assessment indicates the potential for a type of degradation to occur at a location not previously inspected with a technique capable of detecting this type of degradation at this location and that may satisfy the applicable *tube repair criteria*, the minimum number of locations inspected with such a capable inspection technique during the remainder of the inspection period may be prorated." (emphasis added).

The Technical Specification Task Force, by letter dated March 28, 2012 (NRC Accession No. ML12088A082), has determined that the paragraph shown above contains an administrative error. The italicized phrase in paragraph 5.5.9.d.2 (above) should state "tube plugging [or repair] criteria," consistent with the other changes made in TSTF-510, Revision 2.



FPL has corrected this administrative error in the submitted mark-up for TS 6.8.4.j.d.2. This change meets the original intent of TSTF-510.

**2.3.4** Revised (clean) TS pages are not included in this amendment request given the outstanding Turkey Point license amendment request for Permanent Alternate Repair Criteria (H\*) dated April 30th, 2012, which will impact some of the same TS pages. Providing only mark-ups of the proposed TS changes satisfies the requirements of 10 CFR 50.90 in that the mark-ups fully describe the changes desired. This is an administrative deviation from the NRC's model application dated October 27, 2011, with no impact on the NRC's model safety evaluation published in the same Federal Register notice. As a result of this deviation, the contents and numbering of the attachments for this amendment request differ from the attachments specified in the NRC's model application. Mark-ups of five TS pages with proposed TS changes for Turkey Point are provided in Enclosure 2. Enclosure 2 also includes mark-ups of the three TS pages to additionally reflect the outstanding request for Permanent Alternate Repair Criteria (i.e., TS pages 6-18a, 6-18b, and 6-22a). Further, mark-ups of the proposed changes to the TS Bases pages for Turkey Point are provided in Enclosure 3. Enclosure 3 also provides mark-ups of the TS Bases page to additionally reflect the outstanding request for Permanent Alternate Repair Criteria (i.e., TS Bases page 57). The proposed changes to the TS Bases are provided for NRC information only and do not require NRC approval. Changes to the Bases will be incorporated in accordance with the TS Bases Control Program.

### **3.0 REGULATORY ANALYSIS**

#### **3.1 No Significant Hazards Consideration Determination**

FPL requests adoption of an approved change to the standard technical specifications (STS) into the plant specific technical specifications (TS) for Turkey Point Units 3 and 4, to revise TS 6.8.4.j, "Steam Generator (SG) Program," TS 6.9.1.8, "Steam Generator Tube Inspection Report," and TS 3/4.4.5 "Steam Generator (SG) Tube Integrity" to address inspection periods and other administrative changes and clarifications.

As required by 10 CFR 50.91(a), an analysis of the issue of no significant hazards consideration is presented below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change revises the Steam Generator (SG) Program to modify the frequency of verification of SG tube integrity and SG tube sample selection. A steam generator tube rupture (SGTR) event is one of the design basis accidents that are analyzed as part of a plant's licensing basis. The proposed SG tube inspection frequency and sample selection criteria will continue to ensure that the SG tubes are inspected such that the probability of a SGTR is not increased. The consequences of a SGTR are bounded by the conservative assumptions in the design basis accident analysis. The proposed change will not cause the consequences of a SGTR to exceed those assumptions. Therefore, it is concluded that this change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed changes to the Steam Generator Program will not introduce any adverse changes to the plant design basis or postulated accidents resulting from potential tube degradation. The proposed change does not affect the design of the SGs or their method of operation. In addition, the proposed change does not impact any other plant system or component.

Therefore, it is concluded that this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The SG tubes in pressurized water reactors are an integral part of the reactor coolant system pressure boundary and, as such, are relied upon to maintain the primary system's pressure and inventory. As part of the reactor coolant system pressure boundary, the SG tubes are unique in that they are also relied upon as a heat transfer surface between the primary and secondary systems such that residual heat can be removed from the primary system. In addition, the SG tubes also isolate the radioactive fission products in the primary coolant from the secondary system. In summary, the safety function of a SG is maintained by ensuring the integrity of its tubes.

Steam generator tube integrity is a function of the design, environment, and the physical condition of the tube. The proposed change does not affect tube design or operating environment. The proposed change will continue to

require monitoring of the physical condition of the SG tubes such that there will not be a reduction in the margin of safety compared to the current requirements.

Therefore, it is concluded that the proposed change does not involve a significant reduction in a margin of safety.

Based on the above, FPL concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c) and accordingly, a finding of "no significant hazards consideration" is justified.

#### **4.0 ENVIRONMENTAL EVALUATION**

The proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed change meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.