



OCT 03 2006

L-2006-228  
10 CFR 50.90  
Page 1 of 4

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, D. C. 20555

Re: Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Revision to Proposed License Amendment Request  
Steam Generator Alternate Repair Criteria  
For Tube Portion within the Tubesheet

References:

1. FPL letter L-2006-092, License Amendment Request for Steam Generator Alternate Repair Criteria for Tube Portion within the Tubesheet, April 27, 2006.
2. NRC letter to FPL, Turkey Point Nuclear Plant, Units 3 and 4- Request for Additional Information Regarding Scope of Steam Generator Tube Inspections within the Thickness of the Tube Sheet (TAC Nos. MD1380 and MD1381), August 22, 2006.

By letter L-2006-092, dated April 27, 2006, (Reference 1) Florida Power and Light Company (FPL) submitted a request to amend Facility Operating Licenses DPR-31 and DPR-41 for Turkey Point Units 3 and 4. The requested change would revise the Technical Specification (TS) 3/4.4.5, Steam Generator (SG) Surveillance Requirements to exclude the region of the steam generator tubes below 17 inches from the top of the hot leg tubesheet from the inspection requirements.

In Reference 2, the NRC requested additional information regarding the amendment request. During a September 19, 2006 telephone conference with the NRC staff, it was determined that further review and evaluation would be required prior to approving the proposed change on a permanent basis. However, the NRC staff indicated that sufficient basis may exist to issue the amendment as a one-time allowance. Therefore, FPL is reducing the scope of the requested amendment (Reference 1) to a one-time change rather than a permanent change to TS 3/4.4.5. This scope reduction limits the duration of the proposed change: for Unit 3, the period ranging from Unit 3 refueling outage 23 in the fall of 2007 through the subsequent operating cycles until the next steam generator tube inspection; for Unit 4, the period ranging from Unit 4 refueling outage 23 in the fall of 2006 through the subsequent operating cycles until the next steam generator tube inspection. The NRC staff also determined that for a one-time amendment request, a response to Question No. 4 of the request for additional information (Reference 2) was necessary. Attachment 1 provides FPL's response to Question No. 4. FPL will provide a

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response to the balance of the requested additional information in a separate amendment request for implementation of the proposed change to TS 3/4.4.5 on a permanent basis.

Please note that the proposed change to TS 3/4.4.6 Reactor Coolant System Leakage, requested by Reference 1, is not affected by the revised one-time allowance amendment request for TS 3/4.4.5. However, during the September 19, 2006 telephone conversation with the NRC staff, two editorial changes were requested related to the proposed change to TS 3/4.4.6.2, Item c. Enclosure 1 provides the affected existing TS pages marked-up to show the revised amendment request and the editorial changes requested. Enclosure 2 provides the affected proposed revised TS pages.

The duration of the change proposed in the amendment request extends through two operating cycles. As a result, FPL makes the following commitments for the period this one-time change to the inspection requirements of TS 3/ 4.4.5 is in effect:

1. If crack indications are found in any SG tube at Turkey Point Unit 3 during refueling outage 23 or Turkey Point Unit 4 during refueling outage 23, then the next inspection for each SG in the affected unit for the degradation mechanism that caused the crack indication shall not exceed 24 effective full power months or one refueling outage (whichever is less). If definitive information, such as from examination of a pulled tube, diagnostic non-destructive testing, or engineering evaluation indicates that a crack-like indication is not associated with a crack(s), then the indication need not be treated as a crack.
2. For Unit 3 during refueling outage 23 and Unit 4 during refueling outage 23, SG tubes that are not fully expanded within the hot leg tubesheet will be included in the scheduled inspections at each unit, and the 17 inch tubesheet inspection limitation will not be applied to these tubes.

Attachment 2 provides a summary of the above regulatory commitments.

Reference 1 provided the technical bases in support of this change. Reference 1 also provided an evaluation of significant hazards consideration in accordance with 10CFR 50.92 and the environmental assessment in accordance with 10 CFR 51.22. The reduction in scope of the amendment request does not alter the significant hazards consideration or the environmental assessment.

FPL requests NRC review and approval of the proposed amendment by the start of the Unit 4 refueling outage 23, which is scheduled to start October 29, 2006, to be effective immediately and with an amendment implementation period of 30 days from the date of issuance.

The Turkey Point Plant Nuclear Safety Committee and the FPL Company Nuclear Review Board have reviewed the revision to the proposed license amendment. A copy of this letter is being forwarded to the State Designee for the State of Florida pursuant to 10 CFR 50.91(b)(1).

Please contact Mr. James Connolly, Licensing Manager at 305-246-6632 if there are any questions about this submittal.

Very truly yours,



Terry O. Jones  
Vice President  
Turkey Point Nuclear Plant

Attachments and Enclosures

ATTACHMENTS

- 1 Response to Question No. 4 of NRC Request for Additional Information
- 2 Regulatory Commitments

ENCLOSURES

- 1 Proposed Technical Specification Change (Mark up)
- 2 Proposed Technical Specification Page

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

STATE OF FLORIDA            )  
  )  
COUNTY OF MIAMI-DADE    )

Terry O. Jones, being first duly sworn, deposes and says:

That he is Vice President, Turkey Point Plant, of Florida Power & Light Company, the Licensee herein;

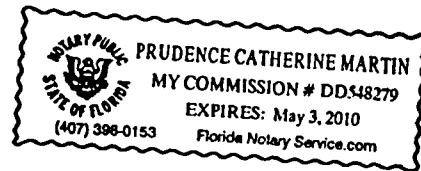
That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information and belief, and that he is authorized to execute the document on behalf of said Licensee.

  
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TERRY O. JONES

Sworn to and subscribed before me

This 3<sup>rd</sup> day of October, 2006

By Terry O. Jones, who is personally known to me.



**ATTACHMENT 1**

**Response to Request for Additional Information**

## RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION

### **NRC Request #4:**

Are there any tubes in the Turkey Point SGs that were not fully expanded (per nominal) within the tubesheet? If so, please describe the extent of this condition and justify why the amendment request is sufficient to ensure the structural and leakage integrity of the affected tube joints.

### **FPL Response #4:**

There are a total of nine tubes in the Turkey Point Unit 3 SGs and nine tubes in the Turkey Point Unit 4 SGs that are not fully expanded within the tubesheets. The structural and leakage integrity of these tubes are ensured by FPL Steam Generator Program Implementation Procedures that require a full tubesheet examination. The requested changes of this LAR do not affect the existing inspection requirements for these tubes.

## **ATTACHMENT 2**

### **Regulatory Commitments**

**REGULATORY COMMITMENTS**

**TURKEY POINT NUCLEAR PLANT UNITS 3 AND 4**

<b>REGULATORY COMMITMENT</b>	<b>Due Date / Event</b>
<p><u>Commitment #1</u>            If crack indications are found in any SG tube at Turkey Point Unit 3 during refueling outage 23 or Turkey Point Unit 4 during refueling outage 23, then the next inspection for each SG in the affected unit for the degradation mechanism that caused the crack indication shall not exceed 24 effective full power months or one refueling outage (whichever is less). If definitive information, such as from examination of a pulled tube, diagnostic non-destructive testing, or engineering evaluation indicates that a crack-like indication is not associated with a crack(s), then the indication need not be treated as a crack.</p>	<p>This commitment applies for the duration that the amendment for the one-time change to TS 3/4.4.5 requested in this LAR is in effect.</p>
<p><u>Commitment #2</u>            For Unit 3 during refueling outage 23 and Unit 4 during refueling outage 23, SG tubes that are not fully expanded within the hot leg tubesheet will be included in the scheduled inspections at each unit, and the 17 inch tubesheet inspection limitation will not be applied to these tubes.</p>	<p>This commitment applies for the duration that the amendment for the one-time change to TS 3/4.4.5 requested in this LAR is in effect.</p>



**ENCLOSURE 1**

**Proposed Marked-Up Technical Specification Pages**

**Page 3/4 4-14**

**Page 3/4 4-19**

REACTOR COOLANT SYSTEM

STEAM GENERATORS

SURVEILLANCE REQUIREMENTS (Continued)

4.4.5.4 Acceptance Criteria

a. As used in this specification:

- 1) Imperfection means an exception to the dimensions, finish or contour of a tube from that required by fabrication drawings or specifications. Eddy-current testing indications below 20% of the nominal tube wall thickness, if detectable, may be considered as imperfections;
- 2) Degradation means a service-induced cracking, wastage, wear or general corrosion occurring on either inside or outside of a tube;
- 3) Degraded Tube means a tube containing imperfections greater than or equal to 20% of the nominal wall thickness caused by degradation;
- 4) % Degradation means the percentage of the tube wall thickness affected or removed by degradation;
- 5) Defect means an imperfection of such severity that it exceeds the plugging limit. A tube containing a defect is defective.
- 6) Plugging Limit means the imperfection depth at or beyond which the tube shall be removed from service because it may become unserviceable prior to the next inspection and is equal to 40% of the nominal tube wall thickness; Insert A
- 7) Unserviceable describes the condition of a tube if it leaks or contains a defect large enough to affect its structural integrity in the event of an Operating Basis Earthquake, a loss-of-coolant accident, or a steam line or feedwater line break as specified in 4.4.5.3c, above;
- 8) Tube Inspection means an inspection of the steam generator tube from the point of entry (hot leg side) completely around the U-bend to the top support of the cold leg, or from the point of entry (cold leg side) completely around the U-bend and to the bottom of the hot leg; and Insert B

**Insert A**

. For Unit 3 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, and for Unit 4 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, this criterion does not apply to degradation identified in the portion of the tube below 17 inches from the top of the hot leg tubesheet. Degradation found in the portion of the tube below 17 inches from the top of the hot leg tubesheet does not require plugging. For Unit 3 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, and for Unit 4 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, all tubes with degradation identified in the portion of the tube within the region from the top of the hot leg tubesheet to 17 inches below the top of the tubesheet shall be removed from service

**Insert B**

. For Unit 3 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, and for Unit 4 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, the portion of the tube below 17 inches from the top of the hot leg tubesheet is excluded

REACTOR COOLANT SYSTEM

OPERATIONAL LEAKAGE

LIMITING CONDITION FOR OPERATING

3.4.6.2 Reactor Coolant System leakage shall be limited to:

- a. No PRESSURE BOUNDARY LEAKAGE,
- b. 1 GPM UNIDENTIFIED LEAKAGE,
- c. 1 GPM total primary-to-secondary leakage through all steam generators and 500 gallons per day through any one steam generator, (SG)
- d. 10 GPM IDENTIFIED LEAKAGE from the Reactor Coolant System, and
- e. Leakage as specified in Table 3.4-1 up to a maximum of 5 GPM at a Reactor Coolant System pressure of  $2235 \pm 20$  psig from any Reactor Coolant System Pressure Isolation Valve specified in Table 3.4-1.\*

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With any Reactor Coolant System leakage greater than any one of the above limits, excluding PRESSURE BOUNDARY LEAKAGE, and leakage from Reactor Coolant System Pressure Isolation Valves, reduce the leakage rate to within limits within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With any Reactor Coolant System Pressure Isolation Valve leakage greater than allowed by 3.4.6.2.e above operation may continue provided:
  1. Within 4 hours verify that at least two valves in each high pressure line having a non-functional valve are in, and remain in that mode corresponding to the isolated condition, i.e., manual valves shall be locked in the closed position; motor operated valves shall be placed in the closed position and power supplies deenergized. Follow applicable ACTION statement for the affected system, and

\* Test pressure less than 2235 psig are allowed. Minimum differential test pressure shall not be less than 150 psid. Observed leakage shall be adjusted for the actual test pressure up to 2235 psig assuming the leakage to be directly proportional to pressure differential to the one-half power.

**ENCLOSURE 2**

**Proposed Revised Technical Specification Pages**

**Page 3/4 4-14**

**Page 3/4 4-19**

## REACTOR COOLANT SYSTEM

### STEAM GENERATORS

#### SURVEILLANCE REQUIREMENTS (Continued)

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##### 4.4.5.4 Acceptance Criteria

a. As used in this specification:

- 1) Imperfection means an exception to the dimensions, finish or contour of a tube from that required by fabrication drawings or specifications. Eddy-current testing indications below 20% of the nominal tube wall thickness, if detectable, may be considered as imperfections;
- 2) Degradation means a service-induced cracking, wastage, wear or general corrosion occurring on either inside or outside of a tube;
- 3) Degraded Tube means a tube containing imperfections greater than or equal to 20% of the nominal wall thickness caused by degradation;
- 4) % Degradation means the percentage of the tube wall thickness affected or removed by degradation;
- 5) Defect means an imperfection of such severity that it exceeds the plugging limit. A tube containing a defect is defective.
- 6) Plugging Limit means the imperfection depth at or beyond which the tube shall be removed from service because it may become unserviceable prior to the next inspection and is equal to 40% of the nominal tube wall thickness. For Unit 3 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, and for Unit 4 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, this criterion does not apply to degradation identified in the portion of the tube below 17 inches from the top of the hot leg tubesheet. Degradation found in the portion of the tube below 17 inches from the top of the hot leg tubesheet does not require plugging. For Unit 3 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, and for Unit 4 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, all tubes with degradation identified in the portion of the tube within the region from the top of the hot leg tubesheet to 17 inches below the top of the tubesheet shall be removed from service;
- 7) Unserviceable describes the condition of a tube if it leaks or contains a defect large enough to affect its structural integrity in the event of an Operating Basis Earthquake, a loss-of-coolant accident, or a steam line or feedwater line break as specified in 4.4.5.3c, above;
- 8) Tube Inspection means an inspection of the steam generator tube from the point of entry (hot leg side) completely around the U-bend to the top support of the cold leg, or from the point of entry (cold leg side) completely around the U-bend and to the bottom of the hot leg. For Unit 3 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, and for Unit 4 during Refueling Outage 23 and the subsequent operating cycles until the next scheduled inspection, the portion of the tube below 17 inches from the top of the hot leg tubesheet is excluded; and

REACTOR COOLANT SYSTEM

OPERATIONAL LEAKAGE

LIMITING CONDITION FOR OPERATING

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3.4.6.2 Reactor Coolant System leakage shall be limited to:

- a. No PRESSURE BOUNDARY LEAKAGE,
- b. 1 GPM UNIDENTIFIED LEAKAGE,
- c. 150 gallons per day primary-to-secondary leakage through any one steam generator (SG),
- d. 10 GPM IDENTIFIED LEAKAGE from the Reactor Coolant System, and
- e. Leakage as specified in Table 3.4-1 up to a maximum of 5 GPM at a Reactor Coolant System pressure of  $2235 \pm 20$  psig from any Reactor Coolant System Pressure Isolation Valve specified in Table 3.4-1.\*

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With any PRESSURE BOUNDARY LEAKAGE, be in at least HOT STANDBY within 6 hours and in COLD SHUTDOWN within the following 30 hours.
- b. With any Reactor Coolant System leakage greater than any one of the above limits, excluding PRESSURE BOUNDARY LEAKAGE, and leakage from Reactor Coolant System Pressure Isolation Valves, reduce the leakage rate to within limits within 4 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.
- c. With any Reactor Coolant System Pressure Isolation Valve leakage greater than allowed by 3.4.6.2.e above operation may continue provided:
  1. Within 4 hours verify that at least two valves in each high pressure line having a non-functional valve are in, and remain in that mode corresponding to the isolated condition, i.e., manual valves shall be locked in the closed position; motor operated valves shall be placed in the closed position and power supplies deenergized. Follow applicable ACTION statement for the affected system, and

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\* Test pressure less than 2235 psig are allowed. Minimum differential test pressure shall not be less than 150 psid. Observed leakage shall be adjusted for the actual test pressure up to 2235 psig assuming the leakage to be directly proportional to pressure differential to the one-half power.