



AUG 11 2011
L-2011-304
10 CFR 50.90

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

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
Response to NRC Request for Additional Information Regarding
Extended Power Uprate License Amendment Request No. 205 and
Balance of Plant Issues

References:

- (1) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-113), "License Amendment Request for Extended Power Uprate (LAR 205)," (TAC Nos. ME4907 and ME4908), Accession No. ML103560169, October 21, 2010.
- (2) Email from Jason Paige (NRC) to Steve Hale (FPL), "Turkey Point EPU – Balance of Plant (SBPB) Request for Additional Information – Round 1.2 (Part 2)", August 2, 2011.

By letter L-2010-113 dated October 21, 2010 [Reference 1], Florida Power and Light Company (FPL) requested to amend Renewed Facility Operating Licenses DPR-31 and DPR-41 and to revise the Turkey Point (PTN) Units 3 and 4 Technical Specifications (TS). The proposed amendment will increase each unit's licensed core power level from 2300 megawatts thermal (MWt) to 2644 MWt and revise the Renewed Facility Operating Licenses and TS to support operation at this increased core thermal power level. This represents an approximate increase of 15% and is therefore considered an extended power uprate (EPU).

By email from the U.S. Nuclear Regulatory Commission (NRC) Project Manager (PM) on August 2, 2011 [Reference 2], additional information was requested by NRC staff in the Balance of Plant Branch (SBPB) to support the review of the EPU License Amendment Request (LAR) [Reference 1]. The RAI consisted of one question pertaining to planned improvements to the PTN auxiliary feedwater (AFW) pumps. The RAI question and the FPL response are documented in the attachment to this letter.

In accordance with 10 CFR 50.91(b)(1), a copy of this letter is being forwarded to the State Designee of Florida.

This submittal does not alter the significant hazards consideration or environmental assessment previously submitted by FPL letter L-2010-113 [Reference 1].

This submittal contains no new commitments and no revisions to existing commitments.

Should you have any questions regarding this submittal, please contact Mr. Robert J. Tomonto, Licensing Manager, at (305) 246-7327.

A001
NRK

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

Executed on August 11, 2011.

Very truly yours,

A handwritten signature in black ink, appearing to read "Michael Kiley", with a stylized flourish at the end.

Michael Kiley
Site Vice President
Turkey Point Nuclear Plant

Attachment

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

Turkey Point Units 3 and 4
RESPONSE TO NRC RAI REGARDING EPU LAR NO. 205
AND SBPB BALANCE OF PLANT ISSUES

ATTACHMENT

Response to Request for Additional Information

The following information is provided by Florida Power and Light Company (FPL) in response to the U. S. Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI). This information was requested to support License Amendment Request (LAR) No. 205, Extended Power Uprate (EPU), for Turkey Point Nuclear Plant (PTN) Units 3 and 4 that was submitted to the NRC by FPL via letter (L-2010-113) dated October 21, 2010 [Reference 1].

By email from the NRC Project Manager (PM) on August 2, 2011 [Reference 2], additional information was requested by NRC staff in the Balance of Plant Branch (SBPB) to support the review of the EPU LAR [Reference 1]. The RAI consisted of one question pertaining to planned improvements to the PTN auxiliary feedwater (AFW) pumps. The RAI question and the FPL response are documented below.

SBPB-1.2.1 Section 2.5.4.5 of the Turkey Point EPU licensing report states that the auxiliary feedwater pumps would be refurbished / modified to ensure that each auxiliary feedwater (AFW) pump will be capable of achieving the increased minimum flow requirements for a loss of offsite power at EPU conditions. The NRC staff initially interpreted this statement as indicating the AFW pumps would be subject to repairs or essentially like-for-like component replacements that maintained the pumps within existing bounds for operation. However, upon further evaluation of the report, the NRC staff determined that more extensive modifications may have been anticipated to provide the specified performance.

Clarify the extent of modifications necessary for the AFW pumps to provide the increased minimum flow capacity. If the modifications result in changes in the limits for acceptable operation, such as increased required net positive suction head or increased steam supply pressure, provide the calculations demonstrating the more restrictive boundary conditions to satisfy operation at EPU conditions. Also, identify any modifications that have the potential to significantly affect the reliability of the AFW pumps.

The refurbishment is limited to restoring the AFW pumps' condition to provide additional operational margin within the previously evaluated performance limits. The refurbishment will not require any physical modification to the existing pumps that would exceed the pump design pressure and temperature. The performance of the refurbished pumps will be restored within the previously evaluated design characteristics, such as net positive suction head and steam supply pressure.

The refurbishment includes activities such as reconditioning of the casings, resizing of the stuffing box, weld repair of the impellers, cleaning and de-burring of worn components, shaft replacement, replacement of bushings to accommodate the resized stuffing box, and replacement of some ring channels with corrosion resistant materials. None of these will impact the reliability of the AFW pumps.

References

- (1) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-113), "License Amendment Request for Extended Power Uprate (LAR 205)," (TAC Nos. ME4907 and ME4908), Accession No. ML103560169, October 21, 2010.
- (2) Email from Jason Paige (NRC) to Steve Hale (FPL), "Turkey Point EPU – Balance of Plant (SBPB) Request for Additional Information – Round 1.2 (Part 2)", August 2, 2011.