Florida Power & Light, 9760 S.W. 344 St. Homestead, FL 33035

FPL

AUG 16 2011

L-2011-303
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
Instrumentation and Controls 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 – Instrumentation and Controls (EICB) Request for Additional Information – Round 1.3 (Part 3)", 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 Instrumentation and Controls Branch (EICB) to support the review of the EPU LAR [Reference 1]. The RAI consisted of one question pertaining to periodic surveillance testing of steamline pressure instrumentation credited in the steamline break accident analysis. 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
NRR

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

Executed on August 16, 2011.

Very truly yours,

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 EICB INSTRUMENTATION AND CONTROLS 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 Instrumentation and Controls Branch (EICB) to support the review of the EPU LAR [Reference 1]. The RAI consisted of one question pertaining to periodic surveillance testing of steamline pressure instrumentation credited in the steamline break accident analysis. The RAI question and the FPL response are documented below.

EICB-1.2.1 The licensee proposed to add the following new Note (4) on TS Table 3.3-3 (Page 3-31 of Attachment 2 of licensee amendment request):

> **(4) Time constants utilized in the lead-lag controller for Steam Generator Pressure-Low Steam Line Pressure-Low are t1 ≥ 50 seconds and t2 ≤ 5 seconds. CHANNEL CALIBRATION shall ensure that these time constants are adjusted to these values.**

The licensee stated in page 2.6.3.2-7 of Attachment 4 of license amendment request as follows:

> **"For DERs assuming an MSCV failure, the 50/5 lead/lag on steamline pressure causes a low steamline pressure coincident with high steam flow signal to occur within the first 0.2 seconds."**

Provide the planned technical specification periodic test description and surveillance requirements needed to assure that the installed circuitry will meet the required response time to achieve a safety injection initiation signal for this coincident steamline low pressure and steamline high flow signals.

The 0.2 seconds discussed in the licensing report (for DERs assuming an MSCV failure) is a bounding value for the process delay as determined by the analysis tool (RETRAN) for the steamline break (SLB) mass and energy (M/E) release analysis. This is the time, calculated by RETRAN, for the dynamically compensated pressure in the steamline to drop to the low steamline pressure setpoint, and as such, it is not surveilled. The analysis also assumes an additional 2 second delay to account for electronic delays.

Existing loop calibration and periodic surveillance procedures for steam break protection instrumentation will be revised to include verification of the NUS lead/lag module time settings to ensure that the steam generator pressure instrument loops will meet the time response determined by the analysis. This will assure that the installed circuitry will meet the required time response necessary to achieve safety injection initiation as well as main steamline isolation. Surveillance periodicity will be consistent with current TS 4.3.2.1, Table 4.3-2, Functional Unit 4.d for "Steam Line Flow–High, Coincident with Steam Generator Pressure–Low," which is calibrated once per refueling outage (18 months).

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 – Instrumentation and Controls (EICB) Request for Additional Information – Round 1.3 (Part 3)", August 2, 2011.