

APR 2 2 2011 L-2011-153 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:

- M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-113), "License Amendment Request No. 205: Extended Power Uprate (EPU)," (TAC Nos. ME4907 and ME4908), Accession No. ML103560169, October 21, 2010.
- (2) Email from J. Paige (NRC) to T. Abbatiello (FPL), "Turkey Point EPU Instrumentation and Controls (EICB) Request for Additional Information - Round 3", Accession No. ML111020376, April 12, 2011.
- (3) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2011-081), "Response to NRC Request for Additional Information (RAI) Regarding Extended Power Uprate (EPU) License Amendment Request (LAR) No. 205 and Electrical Engineering Branch Issues," Accession No. ML110940179, March 31, 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 revise the Turkey Point 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) dated April 12, 2011 [Reference 2], additional information regarding instrumentation and controls issues was requested by the NRC staff in the Instrumentation and Controls Branch (EICB) to support the review of the EPU License Amendment Request (LAR) [Reference 1]. The Request for Additional Information (RAI) consisted of one (1) question regarding referencing of a figure illustrating OT Δ T and OP Δ T protection. The RAI question and FPL response are documented in the Attachment to this letter. In addition, a correction to the FPL response to an NRC Electrical Engineering Branch (EEEB) RAI question (EEEB-1.12) in letter L-2011-081 [Reference 3] is included to address a clerical error discovered in the emergency diesel generator load table.

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.

AUDI

Turkey Point Units 3 and 4 Docket Nos. 50-250 and 50-251

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

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

Executed on April 22, 2011.

Very truly yours,

Multi

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) 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) dated April 12, 2011 [Reference 2], additional information regarding instrumentation and controls issues was requested by the 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 regarding a referenced UFSAR figure in WCAP-17070-P that depicts $OT\Delta T$ and $OP\Delta T$ protection. The RAI question and FPL response are documented below.

EICB-3.1 Table 3-11 of WCAP-17070-P, Rev. 0 (page 43 & page 44) indicates that the Safety Analysis Limits of "Overtemperature ΔT" and "Overpower ΔT" are Function (11), which refers to Note 11, "As noted in Figure 7.2-1 of the UFSAR". Will Note 11 be revised so that Figure 7.2-1 of the UFSAR will be replaced with Figure 2.8.5.0-2 "Illustration of OTΔT and OPΔT Protection" on the page 2.8.5.0-39 of Attachment 4 of Licensee Amendment Request?

WCAP Table 3-11 references UFSAR Figure 7.2-1 in Note 11. As stated in UFSAR Section 7.2.2, Figure 7.2-1 illustrates only typical core limits and shows the maximum trip setpoints which are used for the protection system. WCAP Table 3-11 does not present the actual OT Δ T and OP Δ T values. Licensing Report (LR) Table 2.8.5.0-4 and Figure 2.8.5.0-2 do provide the actual OT Δ T and OP Δ T values based on the results of the current EPU calculation. However, Note 11 in Table 3-11 of WCAP-17070-P is not intended to provide the specific values for OT Δ T and OP Δ T protection but rather to simply point to a typical OT Δ T and OP Δ T and OP Δ T protection versus T_{avg} diagram in order to illustrate the relationship between OT Δ T and OP Δ T protection and T_{avg}. Therefore, there is no change required to WCAP Table 3-11 Note 11.

Correction

During a review of FPL letter L-2011-081 [Reference 3], a minor error was found in the FPL response to NRC RAI question EEEB-1.12. Specifically, the maximum EPU overfrequency automatic load for the most limiting emergency diesel generator (3A) was shown as 1741.08 kw rather than 1742.09 kw and the error was carried forward in the summation. See table below.

| UNIT 3 M | AXIMUM LOAD AT EP EDG 3A | U |
|----------------------------|----------------------------------|----------------------------------|
| | Load @ 60 Hz (kW) | Load @ 60.6 Hz (kW) |
| Description | Unit 3 LOOP with Unit 3 LOCA, | Unit 3 LOOP with Unit 3 LOCA, |
| | 0-85.5 sec | 0-85.5 sec |
| Automatic Loads | 1694.95 | 1742.09 |
| Manual Loads | 258.82 | 266.63 |
| Automatic and Manual Loads | 1953.77 | 2008.72 |

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References

- 1. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-113), "License Amendment Request No. 205: Extended Power Uprate (EPU)," (TAC Nos. ME4907 and ME4908), Accession No. ML103560169, October 21, 2010.
- 2. Email from J. Paige (NRC) to T. Abbatiello (FPL), "Turkey Point EPU Instrumentation and Controls (EICB) Request for Additional Information Round 3", Accession No. ML111020376, April 12, 2011.
- 3. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2011-081), "Response to NRC Request for Additional Information (RAI) Regarding Extended Power Uprate (EPU) License Amendment Request (LAR) No. 205 and Electrical Engineering Branch Issues," Accession No. ML110940179, March 31, 2011.