



MAY 26 2011
L-2011-198
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
Containment and Ventilation Issues

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 – Containment and Ventilation (SCVB) Request for Additional Information - Round 1", Accession No. ML110950084, April 1, 2011.
- (3) M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2011-084), "Response to NRC Request for Additional Information Regarding Extended Power Uprate License Amendment Request No. 205 and Containment and Ventilation Issues," Accession No. ML11119A135, April 28, 2011.
- (4) Email from J. Paige (NRC) to T. Abbatiello (FPL), "Turkey Point EPU – Containment and Ventilation (SCVB) Request for Additional Information - Round 2", May 18, 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).

In an email dated April 1, 2011 [Reference 2], the NRC staff requested additional information regarding FPL's request to implement the EPU. The RAI consisted of eleven (11) questions from the NRC's Containment and Ventilation Branch (SCVB), one of which involved the descriptions of the control room emergency ventilation system operating characteristics in EPU Licensing Report (LR) Sections 2.5.3.1 and 2.9.2. On April 28, 2011, FPL provided its response to the RAI question by FPL letter L-2011-084 [Reference 3].

By email from the NRC Project Manager (PM) dated May 18, 2011 [Reference 4], the SCVB staff again requested additional information regarding the filter removal efficiency and inleakage flow parameters used as part of the "Fission Product Control" evaluation in LR Section 2.5.3.1 in order to support the review of the EPU License Amendment Request (LAR) [Reference 1]. The RAI question and the FPL response are documented in the Attachment to this letter.

A084
MRR

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.

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

Executed on May 26, 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 SCVB CONTAINMENT AND VENTILATION 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].

In an email dated April 1, 2011 [Reference 2], the NRC staff requested additional information regarding FPL's request to implement the EPU. The RAI consisted of eleven (11) questions from the NRC's Containment and Ventilation Branch (SCVB), one of which identified an apparent discrepancy between the descriptions of the control room emergency ventilation system operating characteristics in EPU Licensing Report (LR) Sections 2.5.3.1 and 2.9.2. Specifically, LR Section 2.5.3.1 stated that, while the system is in the recirculation mode, the control room filter removal efficiency is 97.5% and the unfiltered inleakage flow is assumed to be no greater than 115 cfm while LR Section 2.9.2 stated that unfiltered air inleakage was limited to 100 cfm and control room filter efficiency for particulates had been increased. On April 28, 2011, FPL provided its response to the RAI question by FPL letter L-2011-084 [Reference 3].

By email from the NRC Project Manager (PM) dated May 18, 2011 [Reference 4], the SCVB staff again requested additional information regarding the filter removal efficiency and inleakage flow parameters used as part of the "Fission Product Control" evaluation in LR Section 2.5.3.1 in order to support the review of the EPU LAR [Reference 1]. The RAI consisted of one follow-up question regarding the correct figures for filter removal efficiency and inleakage flow parameters used as part of the "Fission Product Control" evaluation. The RAI question and the FPL response are documented below.

SCVB-2.1 As stated in FPL's April 28, 2011, response to RAI SCVB-1.1, "the current licensing basis discussion in LR Section 2.9.2 was updated to reflect these AST changes prior to the submittal of the EPU LAR but the technical evaluation contained in LR Section 2.5.3.1 was inadvertently overlooked." Provide the correct figures for filter removal efficiency and in-leakage flow parameters being used as part of the "Fission Product Control" evaluation as it relates to its control room ventilation system emergency post-EPU operating parameters.

AST LAR No. 196 included a proposed change to TS Surveillance Requirement (SR) 4.7.5.c.2a that would have reduced the methyl iodide penetration criteria from 2.5% to 1.25% in order to increase the credited efficiency of the control room filter from 95% to 97.5% for elemental iodines and organic iodides. However, during a public meeting on June 7, 2010, the NRC staff noted that the proposed SR change would conflict with recommendations in Regulatory Guide (RG) 1.52. Therefore, FPL withdrew the proposed SR change via FPL letter L-2010-131 [Reference 5] on June 23, 2010 and restored the credited efficiency of the control room filter to its current value of 95% for elemental iodines and organic iodides.

To offset the resulting increase in the dose consequence caused by this reduction in the filter efficiency for elemental iodines and organic iodides, the assumed filter efficiency for particulates was increased from 97.5% to 99% and the allowable unfiltered inleakage was reduced to no greater than 100 cfm. Revised radiological dose consequence analyses were rerun to reflect these changes and resubmitted to the NRC via FPL letter L-2010-137 [Reference 6] on June 25, 2010. See Table 1.6.3-1 below for a listing of the control room ventilation system parameters from the AST Licensing Technical Report in the Attachment to FPL letter L-2010-137.

**Table 1.6.3-1
Control Room Ventilation System Parameters**

Parameter	Value
Control Room Volume	47,786 ft ³
Normal Operation	
Filtered Make-up Flow Rate	0 cfm
Filtered Recirculation Flow Rate	0 cfm
Unfiltered Make-up Flow Rate	1000 cfm
Unfiltered Inleakage	100 cfm
Emergency Operation	
Recirculation Mode:	
Filtered Make-up Flow Rate	525 cfm
Filtered Recirculation Flow Rate	375 cfm
Unfiltered Make-up Flow Rate	0 cfm
Unfiltered Inleakage	100 cfm
Filter Efficiencies	
Elemental	95%
Organic	95%
Particulate	99%

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 – Containment and Ventilation (SCVB) Request for Additional Information - Round 1", Accession No. ML110950084, April 1, 2011.
3. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2011-084), "Response to NRC Request for Additional Information Regarding Extended Power Uprate License Amendment Request No. 205 and Containment and Ventilation Issues," Accession No. ML11119A135, April 28, 2011.
4. Email from J. Paige (NRC) to T. Abbatiello (FPL), "Turkey Point EPU – Containment and Ventilation (SCVB) Request for Additional Information - Round 2", May 18, 2011.
5. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-131), "Response to 5/28/2010 Request for Additional Information (RAI) Regarding Alternative Source Term (AST) License Amendment Request (LAR) 196 and (TAC Nos. ME1624 and ME1625)," Accession No. ML101760019, June 23, 2010.
6. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2010-137), "Revised Radiological Dose Consequences for Alternative Source Term and Conforming Licensing Amendment Request 196," Accession No. ML101800220, June 25, 2010.