



APR 22 2011
L-2011-135
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
Environmental Review 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 – Environmental Review (RERB) Request for Additional Information - Round 1", Accession No. ML110950083, April 1, 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 1, 2011 [Reference 2], additional information regarding management, storage, and disposal of low-level radioactive waste (LLRW) was requested by the NRC staff in the Environmental Review Branch (RERB) to support their review of the EPU License Amendment Request (LAR). The Request for Additional Information (RAI) consisted of one (1) question regarding LLRW. The RAI question and 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 Ms. Olga Hanek, Acting Licensing Manager, at (305) 246-6607.

ADD
NR

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

Executed on April 22, 2011.

Very truly yours,

A handwritten signature in black ink, appearing to read "Michael Kiley", with a long, sweeping flourish extending to the right.

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 RERB ENVIRONMENTAL REVIEW 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 U.S. Nuclear Regulatory Commission (NRC) Project Manager dated April 1, 2011 [Reference 2], additional information regarding the management, storage, and disposal of low-level radioactive waste (LLRW) was requested by the NRC staff in the Environmental Review Branch (RERB) to support their review of the EPU License Amendment Request (LAR). The Request for Additional Information (RAI) consisted of one question regarding LLRW. The RAI question and the FPL response are documented below.

RERB-1.1 The Supplemental Environmental Report (ER), Section 8.2.2, Offsite Doses at EPU conditions, discusses the projected offsite doses from the proposed power uprate. The ER states that the evaluation of the post-EPU total dose to an offsite member of the public includes the dose contribution from low-level radioactive waste (LLRW). Specifically, the ER's dose evaluation considered the following: radioactive decay of stored waste, stored waste being routinely moved offsite for disposal, and waste generated post-EPU entering storage.

The State of South Carolina's licensed low-level radioactive waste disposal facility, located in Barnwell, South Carolina, has limited access to radioactive waste generators in States that are not part of the Atlantic Low-Level Waste Compact. Since the State of Florida is not a member of the Atlantic Low-Level Waste Compact, the disposal of LLRW from Turkey Point Units 3 & 4 may be impacted. The ER's assumption that stored waste will be routinely moved offsite for disposal may need to be reevaluated in light of the Barnwell facility's limited access. However, the ER does not contain sufficient information about LLRW management, storage, and disposal capabilities at the Turkey Point Units 3& 4 for the NRC staff to determine whether the dose impact from the long-term storage of LLRW needs to be considered in the post-EPU dose evaluation.

Provide additional information on the management, storage, and disposal of LLRW as it relates to the potential impact on offsite doses to members of the public from the proposed EPU. The evaluation of the post-EPU total dose to an offsite member of the public should be revised as appropriate.

Turkey Point Units 3 and 4 have not been able to dispose of LLRW at the Barnwell Low-Level Radioactive Waste Disposal Facility since July 1, 2008 because Florida is not part of the Atlantic compact. FPL does, however, manage LLRW contractually and continues to ship Class A, B and C LLRW offsite for processing and disposal. Turkey Point Units 3 and 4 are currently covered under an FPL contract with EnergySolutions, Inc. for the shipment of operational and decommissioning Class A LLRW offsite for processing and disposal and with Studsvik, Inc. for the shipment of Class B & C LLRW offsite for processing, storage and ultimate disposal.

Further, as provided in Attachment 7, Supplemental Environmental Report (ER) and in Attachment 4, Licensing Report (LR), of the EPU LAR, the impact of the EPU on LLRW generation rate and offsite dose is negligible. ER Section 8.1.1, Radiological Waste Streams – Solid Waste, and LR Sections 2.5.6.3, Solid Waste Management Systems, and 2.10.1, Occupational and Public Radiation Doses, conclude that the proposed EPU has no significant effect on the generation of solid waste volume from the primary and secondary side systems since the systems functions are not changing and the volume of inputs remains the same. ER Section 8.2.2, Offsite Doses at Power Uprate Conditions, and LR Section 2.10.1 conclude that offsite doses from solid LLRW, as a result of the projected increase in activity due to the EPU, is effectively controlled and that direct shine doses due to accumulation of stored solid radioactive waste would remain negligible.

In summary, FPL finds that it is unnecessary to revise the post-EPU total dose to an offsite member of the public for the following reasons:

- FPL contractually manages LLRW to allow for continued offsite processing, storage and disposal of Turkey Point Units 3 and 4 Class A, B and C LLRW;
- The LAR concludes that there will be no significant change to the volume of LLRW from the EPU; and
- The LAR concludes that the impact to offsite doses due to the EPU will remain negligible.

In addition, the State of Texas has also recently made progress with regard to siting a new LLRW disposal facility. Specifically, in January 2011, the Texas Commission on Environmental Quality approved the commencement of construction on the planned Waste Control Specialists LLC low-level radioactive waste disposal facility and the Texas Low-Level Radioactive Waste Disposal Compact Commission approved Preliminary Rules on the Exportation and Importation of Waste.

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 – Environmental Review (RERB) Request for Additional Information - Round 1”, Accession No. ML110950083, April 1, 2011.