



August 29, 2011

L-2011-322  
10 CFR 50.90

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Re: St. Lucie Plant Unit 2  
Docket No. 50-389  
Renewed Facility Operating License No. NPF-16

Response to NRC Health Physics and Human Performance Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request

References:

- (1) R. L. Anderson (FPL) to U.S. Nuclear Regulatory Commission (L-2011-021), "License Amendment Request for Extended Power Uprate," February 25, 2011, Accession No. ML110730116.
- (2) Email from T. Orf (NRC) to C. Wasik (FPL), "St. Lucie 2 EPU Draft RAIs Human Performance Branch (IHPB)," August 2, 2011.

By letter L-2011-021 dated February 25, 2011 [Reference 1], Florida Power & Light Company (FPL) requested to amend Renewed Facility Operating License No. NPF-16 and revise the St. Lucie Unit 2 Technical Specifications (TS). The proposed amendment will increase the unit's licensed core thermal power level from 2700 megawatts thermal (MWt) to 3020 MWt and revise the Renewed Facility Operating License and TS to support operation at this increased core thermal power level. This represents an approximate increase of 11.85% and is therefore considered an Extended Power Uprate (EPU).

By email from the NRC Project Manager dated August 2, 2011 [Reference 2], additional information related to human factors was requested by the NRC staff in the Health Physics and Human Performance Branch (IHPB) to support their review of the EPU LAR. The request for additional information (RAI) identified two questions. The response to these RAIs is provided in Attachment 1 to this letter.

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

A001  
NRR

This submittal does not alter the significant hazards consideration or environmental assessment previously submitted by FPL letter L-2011-021 [Reference 1].

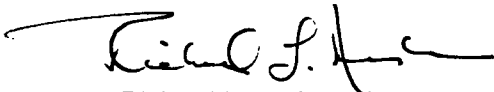
This submittal contains no new commitments and no revisions to existing commitments.

Should you have any questions regarding this submittal, please contact Mr. Christopher Wasik, St. Lucie Extended Power Uprate LAR Project Manager, at 772-467-7138.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on *29-Aug-2011*

Very truly yours,

A handwritten signature in black ink, appearing to read "Richard L. Anderson". The signature is fluid and cursive, with a long horizontal stroke extending to the left.

Richard L. Anderson  
Site Vice President  
St. Lucie Plant

Attachment

cc: Mr. William Passetti, Florida Department of Health

### **Response to Request for Additional Information**

The following information is provided by Florida Power & Light in response to the U. S. Nuclear Regulatory Commission's (NRC) Request for Additional Information (RAI). This information was requested to support Extended Power Uprate (EPU) License Amendment Request (LAR) for St. Lucie Nuclear Plant Unit 2 that was submitted to the NRC by FPL via letter (L-2011-021) dated February 25, 2011, Accession Number ML110730116.

In an email dated August 2, 2011 from NRC (Tracy Orf) to FPL (Chris Wasik), Subject: St. Lucie 2 EPU Draft RAIs Human Performance Branch (IHPB), the NRC requested additional information regarding FPL's request to implement the EPU. The draft RAIs consisted of two questions from the NRC's Health Physics and Human Performance Branch (IHPB). These two RAI questions and the FPL responses are documented below.

#### **IHPB-1**

**Will the EPU result in creating any new operator workarounds?**

#### **Response**

FPL Fleet Procedure OP-AA-108, "Oversight and Control of Operator Burdens," defines an operator workaround as an equipment or program deficiency that provides an obstacle to safe plant operations by requiring operations personnel to take contingency actions to comply with emergency or abnormal procedures, design requirements, or technical specifications." Implementation of the proposed EPU will result in some new/different operator actions as discussed in the LAR. For example, planned plant modifications and risk-informed procedure changes as discussed in Section 1.0 of LAR Attachment 5 will impact operator actions. These changes are discussed further in Section 2.11 of LAR Attachment 5 with respect to human factors. The impact of these changes was reviewed by Operations personnel during the development of the EPU LAR. None of the planned changes result in a new operator workaround.

#### **IHPB-2**

**Do any existing workarounds affect equipment that is credited to be used to prevent or mitigate design-basis accidents under EPU conditions?**

#### **Response**

There are no existing workarounds associated with the operation of St. Lucie Unit 2. As mentioned in our response to IHPB-1, the implementation of the EPU will not result in creating any new operator workarounds. Therefore, there is no effect from workarounds upon equipment that is credited to be used to prevent or mitigate design-basis accidents under EPU conditions. FPL notes that it maintains procedures which ensure that in the event a workaround becomes necessary, its impact upon facility operation is fully assessed. This is discussed in detail in FPL's response to NRC RAI IHPB-2 pertaining to the St. Lucie Unit 1 EPU, as documented in FPL letter L-2011-181 from Richard L. Anderson (FPL) to the NRC Document Control Desk, "Response to Health Physics and Human Performance Branch Request for Additional Information Regarding Extended Power Uprate License Amendment Request," dated May 19, 2011 (ML11144A009).