# October 24, 2006

Mr. J. A. Stall
Senior Vice President, Nuclear and
Chief Nuclear Officer
Florida Power and Light Company
P.O. Box 14000
Juno Beach, FL 33408-0420

SUBJECT: TURKEY POINT PLANT, UNIT NOS. 3 AND 4 - SUPPLEMENTAL REQUEST

FOR ADDITIONAL INFORMATION REGARDING PROPOSED LICENSE

AMENDMENT FOR A SPENT FUEL POOL BORAFLEX REMEDY

(TAC NOS. MC9740 AND MC9741)

Dear Mr. Stall:

By letter dated January 27, 2006, Florida Power & Light Company submitted requests to amend the Operating Licenses for Turkey Point Nuclear Plant, Units 3 and 4. The proposed amendments would revise the Technical Specifications to include new spent fuel pool storage patterns and the use of Metamic rack inserts, in order to remove reliance on Boraflex as a neutron absorber.

On August 8, 2006, the U.S. Nuclear Regulatory Commission (NRC) staff issued a Request for Additional Information (RAI) with a requested response within 60 days. Subsequently, the NRC staff has identified a need for additional details and clarification of the proposed surveillance program for the Metamic rack inserts. These are contained in the enclosed supplemental RAI.

This was discussed with members of your staff on October 3, 2006, and on October 16, 2006, Mr. Paul Czaya agreed that a combined response to both RAIs would be provided by November 30, 2006.

If you have any questions, please contact me at (301) 415-3974.

Sincerely,

/RA/

Brendan T. Moroney, Project Manager Plant Licensing Branch II-2 Division of Operating Reactor Licensing Office of Nuclear Reactor Regulation

Docket Nos. 50-250 and 50-251

Enclosure:

Supplemental RAI

cc w/encl: See next page

Mr. J. A. Stall Florida Power and Light Company

#### CC:

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Mr. William A. Passetti, Chief Department of Health Bureau of Radiation Control 2020 Capital Circle, SE, Bin #C21 Tallahassee, Florida 32399-1741

### **TURKEY POINT PLANT**

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Chief Nuclear Officer
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DATE	10/18/06	10/18/06	10/20/06	10/24/06

# SUPPLEMENTAL REQUEST FOR ADDITIONAL INFORMATION RELATED TO LICENSE AMENDMENT REQUEST FOR SPENT FUEL POOL BORAFLEX REMEDY

# FLORIDA POWER AND LIGHT COMPANY

### TURKEY POINT NUCLEAR PLANT, UNITS 3 AND 4

### DOCKET NOS. 50-250 AND 50-251

By letter dated January 27, 2006 (ML060900250), Florida Power and Light Company (the licensee) submitted a request for review and approval of an amendment to the Turkey Point Unit 3 Operating License (DPR-31) and Turkey Point Unit 4 Operating License (DPR-41). The proposed amendments would revise Technical Specifications Sections 3/4.9.1-Boron Concentration, 3/4.9.14 - Spent Fuel Storage, and 5.5.1 - Criticality, to include new spent fuel storage patterns and the use of Metamic<sup>™</sup> rack inserts. A request for additional information (RAI) dated August 8, 2006 (ML062180074), was forwarded to the licensee. The NRC staff has subsequently identified a need for the following additional information that was not included in the August 8, 2006, RAI.

- 1. The license amendment request proposes use of formed, welded, or a combination of formed and welded inserts. Is it correct for the staff to assume that a combination of formed and welded inserts means that a number of welded inserts and a number of formed inserts may be used? However, if this means that an insert design may consist of welding and forming, please provide a schematic of this insert design.
  - In addition, you indicated that the surveillance program will not vary with insert design, however, areas of interest in different designs should be documented in the surveillance program (i.e., base material, welds, heat affected zones, bend areas).
- 2. Given that spent fuel pool (SFP) conditions may vary between Unit 3 and Unit 4, please confirm that the Metamic<sup>™</sup> insert surveillance program applies to both Unit 3 and Unit 4.
- 3. Please provide the following details regarding the surveillance program:
  - a. Baseline examinations that will be performed on the Metamic<sup>™</sup> inserts prior to being placed in the SFP (i.e., areal density, dimensional measurements, weight, visual inspections, photographs). In addition, discuss whether the baseline inspections will be performed at the fabrication facility or at the site.
  - b. The frequency of Metamic<sup>™</sup> insert surveillances and its justification for each unit. This discussion should include the length of each interval, rationale and criteria by which decreasing/increasing intervals are determined, and the maximum length of time for the interval.

- c. The number of inserts to be examined during each surveillance and the rationale and criteria for making changes in the number of inserts to be examined during that surveillance and future surveillances.
- d. The details of the visual examinations that will be performed during each surveillance to ensure the acceptability of the Metamic<sup>™</sup> absorber material. This discussion should also include the criteria that will used to determine if additional testing and/or re-evaluation of the examination results is necessary.
- e. Plans to perform examinations to validate your visual examinations (i.e., weight measurements, dimensional measurements (length, width, and thickness), Boron content measurement, neutron attenuation testing) and at what frequency these validation examinations will be performed.
- f. Reporting requirements for adverse insert test results.